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Environmental
assessment for
STPE 4-2(13)53 MRL
underpass at
Laurel (drain
line), (P.M.S.
control no. 2599)

# LAUREL UNDERPASS STORM DRAINAGE

LAUREL, MONTANA
STPE 4 - 2(13)53
(P.M.S. C#2599)

# ENVIRONMENTAL ASSESSMENT

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# ENVIRONMENTAL ASSESSMENT

FOR

STPE 4 - 2(13)53
**MRL Underpass at LAUREL (Drain Line)**
(P.M.S. Control No. 2599)

IN

YELLOWSTONE COUNTY, MONTANA

This document has been prepared in conformance with the Montana Environmental Policy Act (MEPA) requirements and contains the information required for an Environmental Assessment under the provisions of ARM 18.2.237(2) and 18.2.239. It has also been prepared in conformance with the National Environmental Policy Act (NEPA) requirements for an Environmental Assessment under 23 CFR 771.119.

Submitted pursuant to:
42 U.S.C. 4332(2)(c)
and
Section 75-1-201, MCA

by the

Montana Department of Transportation
Division of Highways
and the
U.S. Department of Transportation
Federal Highway Administration

Submitted by: Joel M. M Date: May 13, 1996
Montana Department of Transportation

Reviewed & Approved
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Federal Highway Administration

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## 1.0 DESCRIPTION OF THE PROPOSED ACTION

This Environmental Assessment (EA) evaluates proposed improvements to upgrade the existing Laurel Underpass gravity storm drain system. The underpass, located in the south part of Laurel, Montana, provides traffic separation between Montana Rail Link and vehicles on First Avenue South. This is located in the South ½ of Section 9, the Southwest ¼ of Section 15, and Section 16; all in Township - 2 - South, Range - 24 - East, M.P.M. This proposed project is partially inside Laurel's corporate limits, and is entirely within Yellowstone County. The existing storm drain system was designed to carry storm water runoff from the underpass to an outfall at the Yellowstone River located east of the Laurel Water Treatment Plant. See Figure 1-1.

The existing system is a gravity system starting at the Laurel Underpass with the outfall located in the north bank of the Yellowstone River east of the City of Laurel's Water Treatment Plant. The existing system consists of approximately 832± m (2730 feet) of 381± mm (15-inch) diameter clay pipe and approximately 899± m (2950 feet) of 381± mm (15-inch) diameter corrugated metal pipe. As part of this project, the existing 381± mm (15-inch) storm drain will be plugged and abandoned. There are no provisions to provide groundwater drainage for this area. See Figure 1-1.

The present drain line crosses under the easterly portion of the Cenex oil refinery on Laurel's southerly side. The objective of the proposed project is to construct a reliable storm drainage system that will serve the best interests of the Montana Department of Transportation (MDT), the City of Laurel and Cenex, Inc. (Cenex). Typical utility work will be common to each of the action alternatives considered for the proposed project and will include excavation, dewatering (if necessary), trenching and installation of gravity storm drain pipe, trenching and installation of force main pipe, construction of a lift station, rehabilitation of disturbed unimproved areas, and restoration of paved streets.

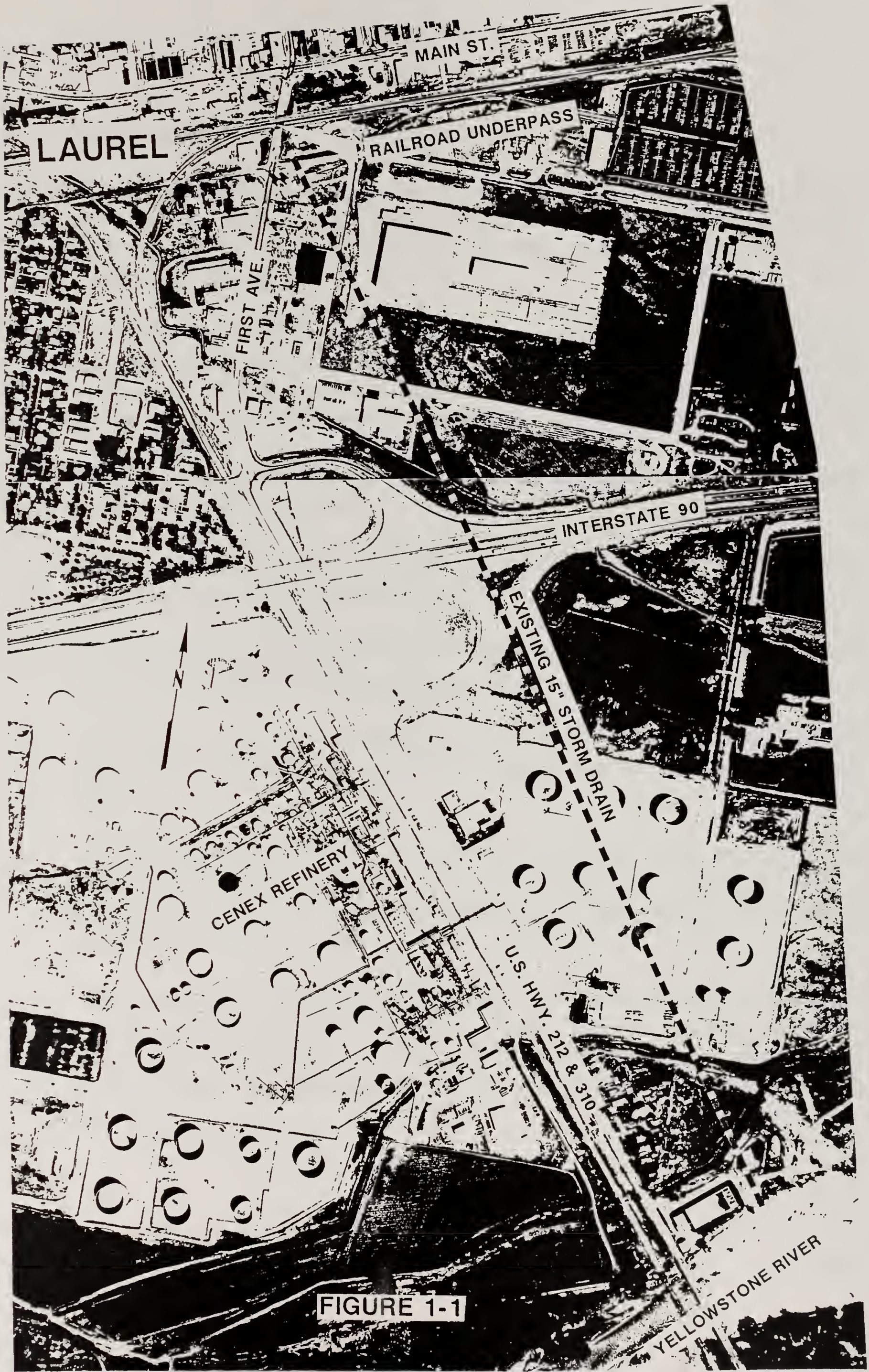

MAIN ST.
LAUREL
RAILROAD UNDERPASS
FIRST AVE.
INTERSTATE 90
N
EXISTING 15" STORM DRAIN
CENEX REFINERY
U.S. HWY. 212 & 310
YELLOWSTONE RIVER

FIGURE 1-1

## 2.0 PURPOSE AND NEED

The existing storm water disposal drain line serving the Laurel Underpass was originally constructed of clay tile pipe in the 1930s, with a corrugated metal pipe replacement section made to the outfall line in the mid-1950s. For all practical purposes, the system has outlived its useful life and needs to be replaced.

In early 1990, Cenex commissioned a consultant to prepare an Alternative Report that examined the existing system and studied six (6) alternatives to the decaying gravity storm drainage system. Cenex retained a second consultant in mid-1995 to re-evaluate that Alternative Report's findings and determine possible additional system alternatives.

Cenex and MDT are jointly undertaking this project to alleviate and improve the following present storm drainage conditions and problems:

- The gravity drain line passes under existing structures and portions of Cenex's tank farm before discharging to the Yellowstone River.
- The underpass becomes inoperable due to flooding during periods of heavy rainfall as the inlets and connecting line capacities are inadequate.
- The underpass is directly connected to the groundwater through the underpass drainage inlets and becomes inoperable due to flooding caused by the fluctuating groundwater table.
- The remaining northerly 579± m (±1900 feet) of original clay tile storm drain line that was installed in the 1930s has probably deteriorated and collapsed. Approximately 899± m (2950 feet) of the southerly portion of clay tile drain line was replaced with corrugated metal pipe in 1955.
- It can be assumed that the 579± m (±1900 feet) of clay tile storm drain line is not carrying the underpass drainage to the Yellowstone River. With the assumed deteriorated condition of the pipe, this line is probably now percolating or discharging the underpass storm drainage to the groundwater whenever the groundwater is lower than the inlet grate elevation.

The reliability of this gravity system has been directly tied to rainfall duration/intensity and/or the groundwater fluctuations over almost 60 years of operation. As a result, MDT has had to pump the overflow whenever the underpass became inoperable due to heavy rainfall and/or an elevated water table. Based on these occurrences, the existing pipe from the underpass to the existing drain lines and inlets has failed and needs to be replaced.

It is important to note that the elevation of the "surcharge" in the existing storm drainage system is higher than the water level in the Yellowstone River. As used in this context, the term "surcharge" means additional or excessive groundwater from other sources that would increase the elevation of the normal groundwater level. The initial Alternative Report notes that the storm water exfiltrates into the area surrounding the storm drainage pipe. However, the opposite may also be true; that the storm drainage pipe is actually carrying groundwater away from the underpass area to the Yellowstone River.

Property damage, such as flooded basements and cracking floor slabs, could occur if the storm drainage pipe is plugged and the groundwater level rises. However, Cenex' second consultant has assessed the available historic groundwater information from the area of the underpass to the Yellowstone River to ascertain the potential for groundwater rise along the existing storm drainage pipe. Existing data, including water level measurements along the entire length of the existing storm drain, shows a clear groundwater gradient from the underpass area to the river. Monitoring data from Cenex actually indicates the groundwater is flowing easterly to the Yellowstone River through the alluvial gravels. The available data and information, albeit somewhat limited, suggests any rise in the groundwater level along the existing storm drain system will not be sufficient to reverse the groundwater gradient. In other words, plugging the existing system will not result in groundwater flow toward the underpass -- it will continue to flow to the Yellowstone River. Potential groundwater level rise in the area of the underpass will be alleviated by the new storm drain system. Considering the area south of the underpass to the Cenex tank farm, the available information indicates it is not likely that abandoning and plugging the existing storm drain will have a significant impact on groundwater levels.

With the exception of two (2) properties, all of the residential properties over and adjacent to the existing storm drainage pipe south of the tank farm have been acquired by Cenex. The houses on the acquired properties are no longer occupied and will be razed. Of the two remaining properties, one is occupied by two mobile homes located south of the refinery tank farm and east of US Highway #212 and #310. The second property is occupied by a single-family residence and is located in the same area. Neither the mobile homes nor the house have basements or concrete slabs which would be subject to problems caused by an elevated groundwater level.

Should the groundwater rise as a result of plugging the existing storm drain line, it is believed that no significant property damage will occur in this area.

If the 381± mm (15-inch) storm drainage pipe is in fact acting as a sub-drain, then the problem becomes more complex. Cenex is anxious to plug and abandon the storm drainage line located under their tank farm to comply with US Environmental Protection Agency (USEPA) requirements related to their tank farm facility located east of US Highway #212 and #310. Likewise, the City of Laurel wants to abandon and plug the line that now runs under buildings and through a questionable (undocumented) right-of-way.

Given all of the above constraints, suspected failures and surcharging, it is impossible to determine the base flow and condition of the existing system. It is also impossible to determine the true condition of the existing system because of the surcharge condition. Normal television inspection is impossible and methods that could possibly be employed to pump down the system to allow television inspection would be extremely costly.

The primary intent of this proposed storm drain project is to alleviate the storm water runoff and groundwater problem at the underpass. None of the studied project alternatives deal with the high groundwater in the area south of the underpass.

Construction of the proposed improved storm drain system will involve a commitment of a range of natural, physical, human and fiscal resources. Land used in the construction of the storm drain system is considered an irreversible commitment during that time the land is used for the system. However, the subject land is currently committed to use as roadways and has been used as such for many years. If a greater need arises for use of the land, or if the existing roadways and proposed storm drain is no longer needed, the land can be converted to other uses. At present, there is no reason to believe such a conversion will ever be necessary or desirable.

Comparatively small amounts of fossil fuels, labor and construction materials will be expended by the proposed project. Additionally, relatively small amounts of labor and natural resources would be used in the fabrication and preparation of construction materials. These materials are generally not retrievable. However, they are not in short supply and their use will not have an adverse effect upon the continued availability of these resources. The proposed construction will also require a minimal one-time expenditure of state, federal and private funds which are not retrievable.

The commitment of these resources is based on the concept that the community and its residents will benefit by the improvements to the local storm drainage system. These benefits include

improved storm drainage reliability, enhanced traffic and pedestrian safety, elimination of periodic accumulation of storm water in the underpass, and reduced maintenance costs.

## 3.0 AREA STORM WATER RUNOFF ANALYSIS

As part of the scope of work for evaluating alternatives to replace the existing storm drainage system, Cenex' second consultant performed a preliminary storm water runoff analysis. This analysis covered the area that contributes to the City of Laurel's 1524± mm (60-inch) storm drain line in East Railroad Street east of the Laurel Underpass. The Natural Resource Conservation Service (formerly SCS) Hydrograph Method was used to perform the storm water runoff analysis.

The results of Cenex' second consultant's analysis are summarized as follows:

1. The maximum available flow for the 1524± mm (60-inch) storm drain line was calculated using the section of the line with the least slope, which is 0.3 percent. When the pipe is flowing full, it will carry 3.5± $m^3$ (123 cubic feet) per second. The maximum flow, found at 94 percent full, is 3.7± $m^3$ per second (133 cfs).

2. The drainage area contributing to the 1524± mm (60-inch) storm drain line was broken down into three zones (see Figure 3-1). The first zone, consisting of residential housing, is referred to in the calculations as the "residential district." The second zone consists of commercial businesses and is referred to in the calculations as the "commercial district." The third zone is the area that will contribute to the storm drain system from the underpass drainage basin. Calculations for each of these zones were based on a design storm of five (5) years.

3. Hydrographs have been created for each of the zones individually, along with a fourth hydrograph showing the total flow volume (see Figure 3-2).

4. The projected maximum 5-year flow for just the residential and commercial districts is 3.0± $m^3$ per second (110 cfs). The projected maximum flow with the underpass area included is 3.3± $m^3$ per second (113.6 cfs). These flow volumes are both below the calculated capacity of the 1524± mm (60-inch) diameter pipe.

5. The depth of flow in the 1524± mm (60-inch) pipe for the current calculated 3.0± $m^3$ per second (110 cfs) flow is approximately 1118± mm (44 inches). When the flows contributing to the storm drain system for the underpass area are included, the depth of flow will increase to 1143± mm (45⅛ inches).

The additional storm water volume created by introducing these underpass area flows into the 1524± mm (60-inch) storm drain pipe under East Railroad Street would not have a significant impact on the overall performance of the City's existing storm drain system.

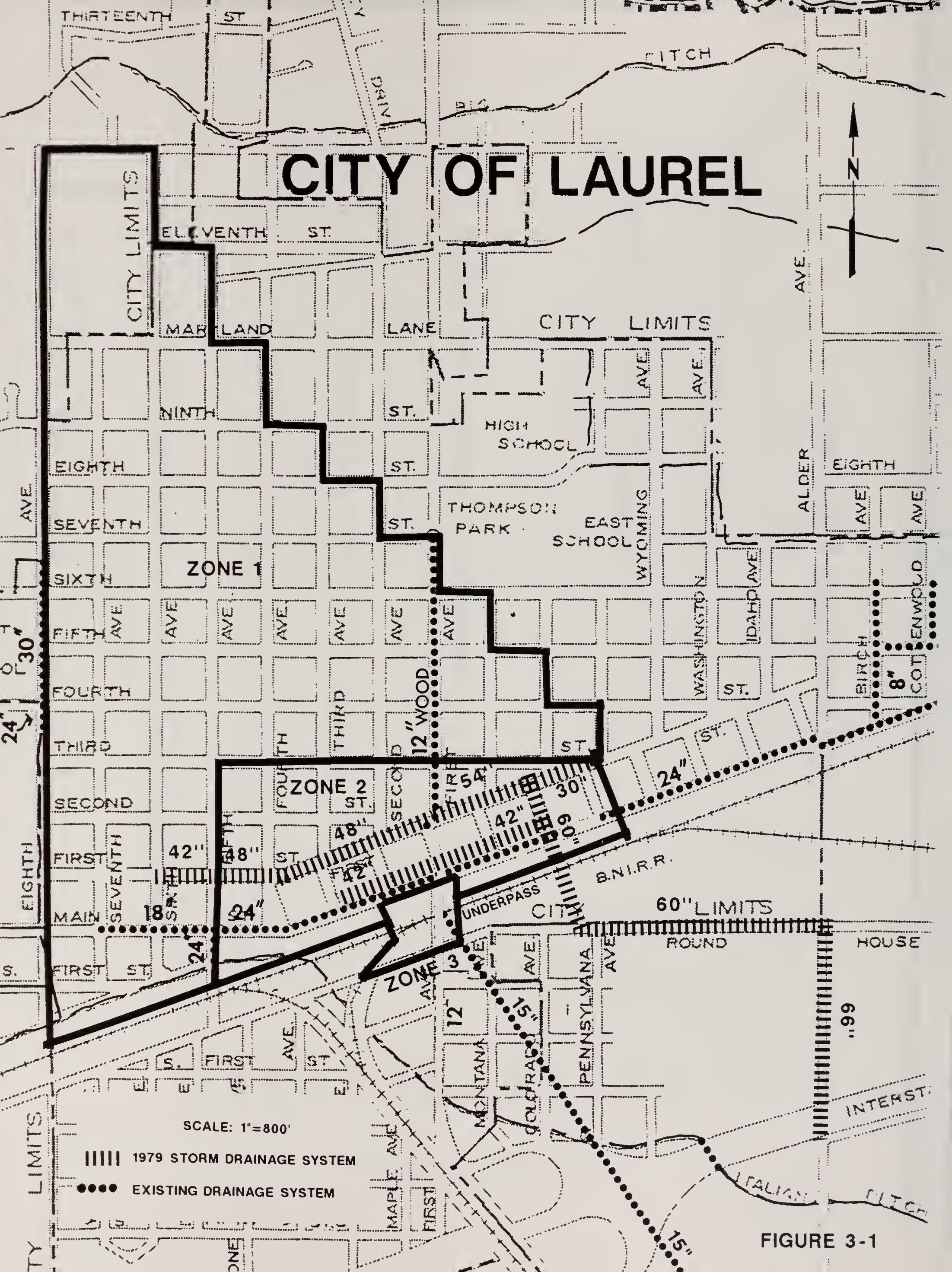

CITY OF LAUREL
N
SCALE: 1"=800'
IIIII 1979 STORM DRAINAGE SYSTEM
●●●● EXISTING DRAINAGE SYSTEM
ZONE 1
ZONE 2
ZONE 3
CITY LIMITS
THIRTEENTH ST
ELEVENTH ST.
MARYLAND LANE
NINTH ST.
EIGHTH ST.
SEVENTH ST.
SIXTH
FIFTH
FOURTH
THIRD ST.
SECOND ST.
FIRST ST.
MAIN ST.
S. FIRST ST.
EIGHTH
SEVENTH
FIFTH
FOURTH
THIRD
SECOND
FIRST
AVE
HIGH SCHOOL
THOMPSON PARK
EAST SCHOOL
WYOMING
WASHINGTON
IDAHO AVE
BIRCH
COTTONWOOD
ALDER AVE.
EIGHTH
B.N.I.R.R.
UNDERPASS
ROUND HOUSE
MONTANA
COLORADO
PENNSYLVANIA AVE
MAPLE AVE
FIRST
INTERST.
ITALIAN DITCH
DITCH
12" WOOD
30"
24"
54"
30"
42"
60"
48"
42"
48"
42"
18"
24"
24"
24"
8"
60"
66"
12"
15"
15"

FIGURE 3-1

# STORM WATER RUNOFF
## LAUREL, MT

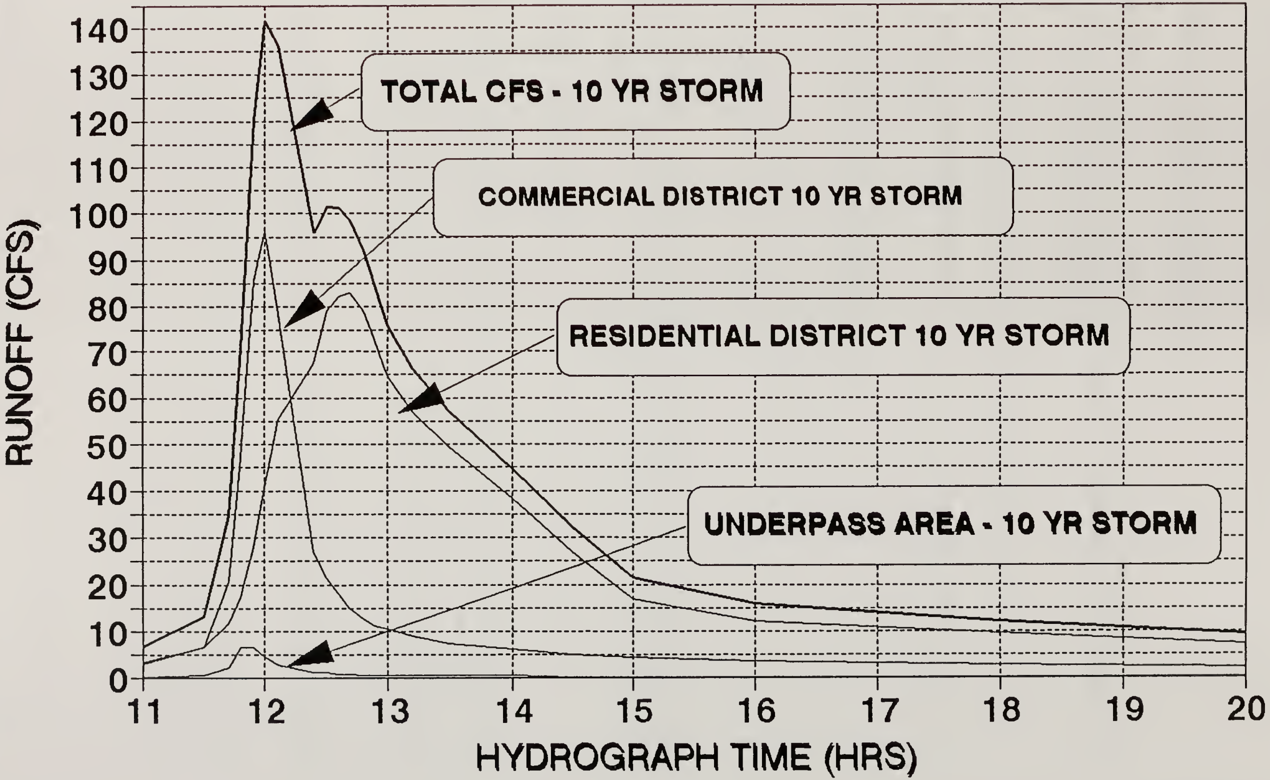


FIGURE 3-2

## 4.0 ALTERNATIVES UNDER CONSIDERATION

Numerous alternatives were evaluated in order to identify the most acceptable plan for the construction of a storm drainage system to replace the existing 60-year old system. This section of the Environmental Assessment:

- Describes alternatives studied and evaluated in detail in this EA;
- Describes alternatives that were considered, but not evaluated in detail in this document;
- Summarizes the action alternatives; and
- Identifies and discusses the Preferred Alternative.

## 4.1 ALTERNATIVES EVALUATED IN DETAIL

Alternatives studied and analyzed in detail in this document were selected based on engineering and environmental studies completed to date by both Cenex consultants, the City of Laurel and MDT.

### 4.1.1 The No-Build Alternative

This alternative would consist of leaving the existing 60-year old storm drain system in operation with no changes or improvements. Given the age of the system and observations by the City of Laurel, MDT and Cenex, it can safely be assumed that the system has served its useful life and cannot be economically repaired or replaced in its present location and configuration.

### 4.1.2 Alternative 8 - Underpass Lift Station/Force Main with Discharge to South Fourth Street Proposed Storm Drain

This alternative would utilize a lift station in the underpass area and a force main with discharge to a proposed gravity storm drain line. The designation of a pipeline as a "force main" indicates that it is a pressurized pipeline and not a gravity line which needs to be laid on a uniform grade. A force main moves liquid under pressure usually from a lower

elevation to a higher elevation by means of a pumping facility. The analysis and description of this alternative includes the following:

- **Location/Alignment -** The lift station would be located in the underpass area with a force main located in East Railroad Street and South Montana Avenue. The force main would discharge into a proposed 610± to 915± mm(24"-36") storm drain located in South Fourth Street which would tie into the City's 1524± mm (60-inch) storm drain line located in Bernhardt Road (see Figure 4-1).

- **Length -** The length of the force main from the lift station to the connection with the proposed storm drain line in South Fourth Street would be approximately 457± m (1500 feet). The length of the proposed storm drain line extension in South Fourth Street from the 1524± mm (60-inch) storm drain line in Bernhardt Road to South First Street would be approximately 807±m (2650 feet).

- **Advantages -** This alternative would have the following advantages:

    1. The depth of the force main would be 1.8± to 2.1± m (6-7 feet) and the depth of the gravity storm drain would be 2.1± to 2.4± m (7-8 feet), which would probably be out of the groundwater level.

    2. Trench dewatering would probably not be required.

    3. The storm drain line extension in South Fourth Street would promote City growth by providing storm drainage capability to existing and future business developments in this area.

    4. Storm drainage could be provided at the intersection of South Fourth Street and US Highway #212 and #310, an existing problem area noted by the City of Laurel.

    5. Traffic disruption and rerouting would be minimal as Montana Avenue South is not a developed/paved street and South Fourth Street is not heavily travelled.

    6. Utility conflicts can be more easily avoided with a force main.

ALTERNATIVE 8

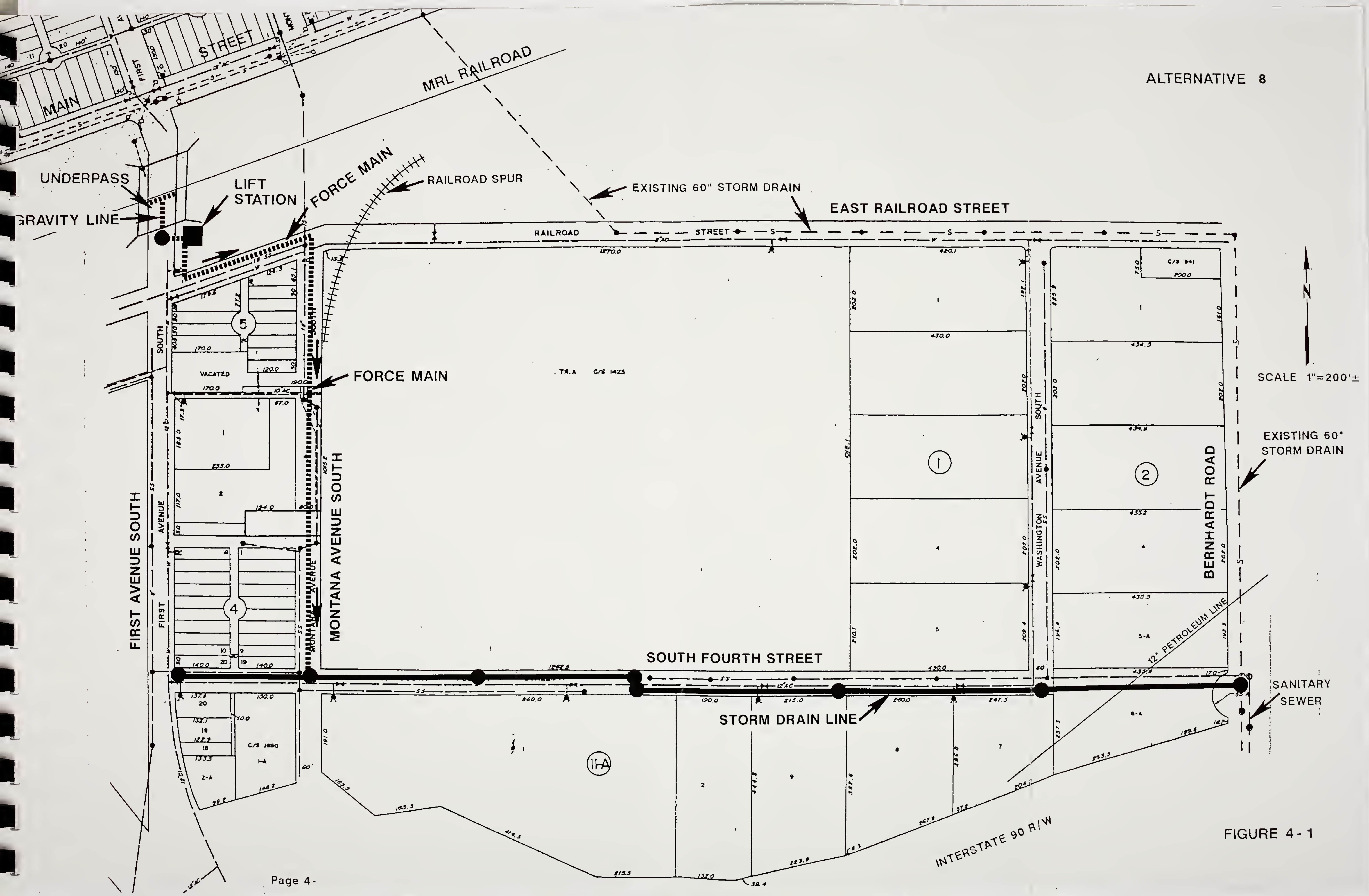


FIGURE 4-1

- **Disadvantages -** This alternative would have the following disadvantages:

    1. A lift station approximately 7.6± to 9.1± m (25-30 feet) deep would be installed which would require a power source and incur associated power costs.

    2. The lift station construction would require dewatering and special construction methods.

    3. Equipment maintenance and replacement would be required for the lift station.

    4. Long force main [457±m (1500 feet)] would be required.

    5. The alignment of the gravity storm drain extension in South Fourth Street could have existing water and sanitary sewer main and services crossing conflicts.

    6. There is a subsurface petroleum/oil pipeline crossing South Fourth Street extending east which could be in conflict with the storm drain line alignment.

    7. The City's 1524± mm (60-inch) storm drain in Bernhardt Road is approximately 2.7± m (9 feet) deep which leaves approximately 1.2± m (4 feet) of cover over the top of the pipe.

    8. A right-of-way or an easement would need to be acquired for the east 137± m (450 feet) of the storm drain line extension. South Fourth Street terminates at the intersection with South Washington Avenue.

    9. Removal and replacement of South Fourth Street pavement for the width of the trench excavation.

    10. Business along South Fourth Street would be disrupted during the period of construction.

### 4.1.3 Alterative 9 - Underpass Lift Station/Force Main with Discharge to South First Avenue and South Fourth Street Proposed Storm Drain

This alternative would utilize a lift station and force main in the underpass area with discharge to a proposed gravity storm drain line. The analysis and description of this alternative includes the following:

- **Location/Alignment -** The lift station and force main would be located in the underpass area. The force main would discharge into a proposed 610± to 915± mm (24"-36") storm drain located in South First Avenue and South Fourth Street which would tie into the City's 1524± mm (60-inch) storm drain line located in Bernhardt Road (see Figure 4-2).

- **Length -** The length of the force main from the lift station to the connection with the storm drain line in South First Avenue is approximately 30± m (100 feet). The length of the proposed storm drain line extension in South Fourth Street from the 1524± mm (60-inch) storm drain line in Bernhardt Road to South First Street is approximately 807± m (2650 feet), and the extension in South First Avenue from South Fourth Street to East Railroad Street is approximately 305± m (1000 feet).

- **Advantages -** This alternative would have the following advantages:

    1. No long force main would be required.

    2. The depth of the force main would be 1.8± to 2.1± m (6-7 feet) and the depth of the gravity storm drain lines would be 2.1± to 2.4± m (7-8 feet) and would probably be out of the groundwater level.

    3. Trench dewatering would probably not be required.

    4. The storm drain line extension in South First Avenue and South Fourth Street would promote City growth by providing storm drainage capability to the existing and future business developments in this area.

    5. Storm drainage could be provided at the intersection of South Fourth Street and US #212 and #310, a problem area noted by the City of Laurel.

ALTERNATIVE 9

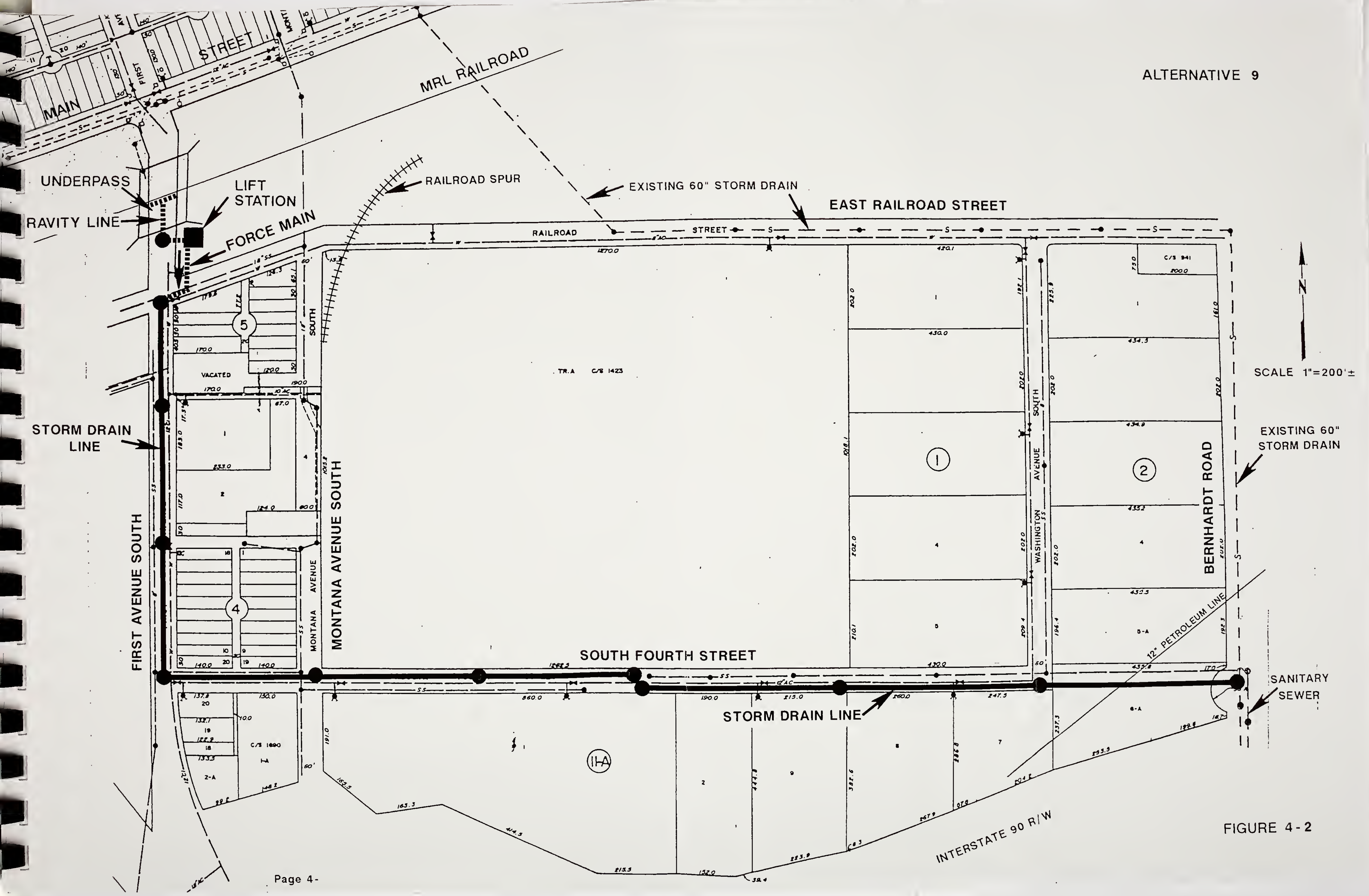


FIGURE 4-2

6. Utility construction would not be necessary in South Montana Avenue.

- **Disadvantages -** This alternative would have the following disadvantages:

1. A lift station approximately 7.6± to 9.1± m (25-30 feet) deep would be installed which would require a power source and incur associated power costs.

2. The lift station construction would require dewatering and special construction methods.

3. Equipment maintenance and replacement would be required for the lift station.

4. Traffic rerouting and disruption would be extensive on this heavily traveled highway with maintenance of traffic during construction being a major consideration.

5. The alignment of the gravity storm drain extensions in South Fourth Street and South First Avenue may have existing water and sanitary sewer mains and services crossing conflicts.

6. There is a subsurface petroleum/oil pipeline crossing South Fourth Street extending east which could be in conflict with the storm drain line alignment.

7. The City's 1524± mm (60-inch) storm drain in Bernhardt Road is approximately 2.7±m (9 feet) deep which leaves approximately 1.2±m (4 feet) of cover over the top of the pipe.

8. A right-of-way or an easement would need to be acquired for the east 137± m (450 feet) of the storm drain line extension. South Fourth Street terminates at the intersection with South Washington Avenue.

9. Removal and replacement of South First Avenue and South Fourth Street pavement for the width of the trench excavation.

10. Business along South First Avenue and South Fourth Street would be disrupted during the period of construction.

### 4.1.4 Alterative 10 - Underpass Lift Station/Force Main with Discharge to the City's 1524± mm (60-Inch) Storm Drain

This alternative includes a lift station in the underpass area and a force main with discharge to an existing storm drain line. The analysis and description of this alternative includes the following:

- **Location/Alignment -** The lift station will be located in the underpass area with a force main located in East Railroad Street. The force main discharges into the City's 1524± mm (60-inch) storm drain line on East Railroad Street at the extension of Colorado Avenue (see Figure 4-3).

- **Length -** The length of the force main from the lift station to the connection to the City's 1524± mm (60-inch) storm drain line is approximately 335±m (1100 feet).

- **Advantages -** This alternative has the following advantages:

    1. The force main's depth of 1.8± to 2.1± m (6-7 feet) is probably out of the groundwater level.

    2. Trench dewatering would probably not be required.

    3. Traffic disruption and re-routing will be minimal.

    4. Utility conflicts are more easily avoided with a force main.

    5. Shorter force main required [335± m (1100 feet)] than Alternative 8.

    6. No gravity storm drain line necessary for discharge to the City's storm drain system.

## ALTERNATIVE 10

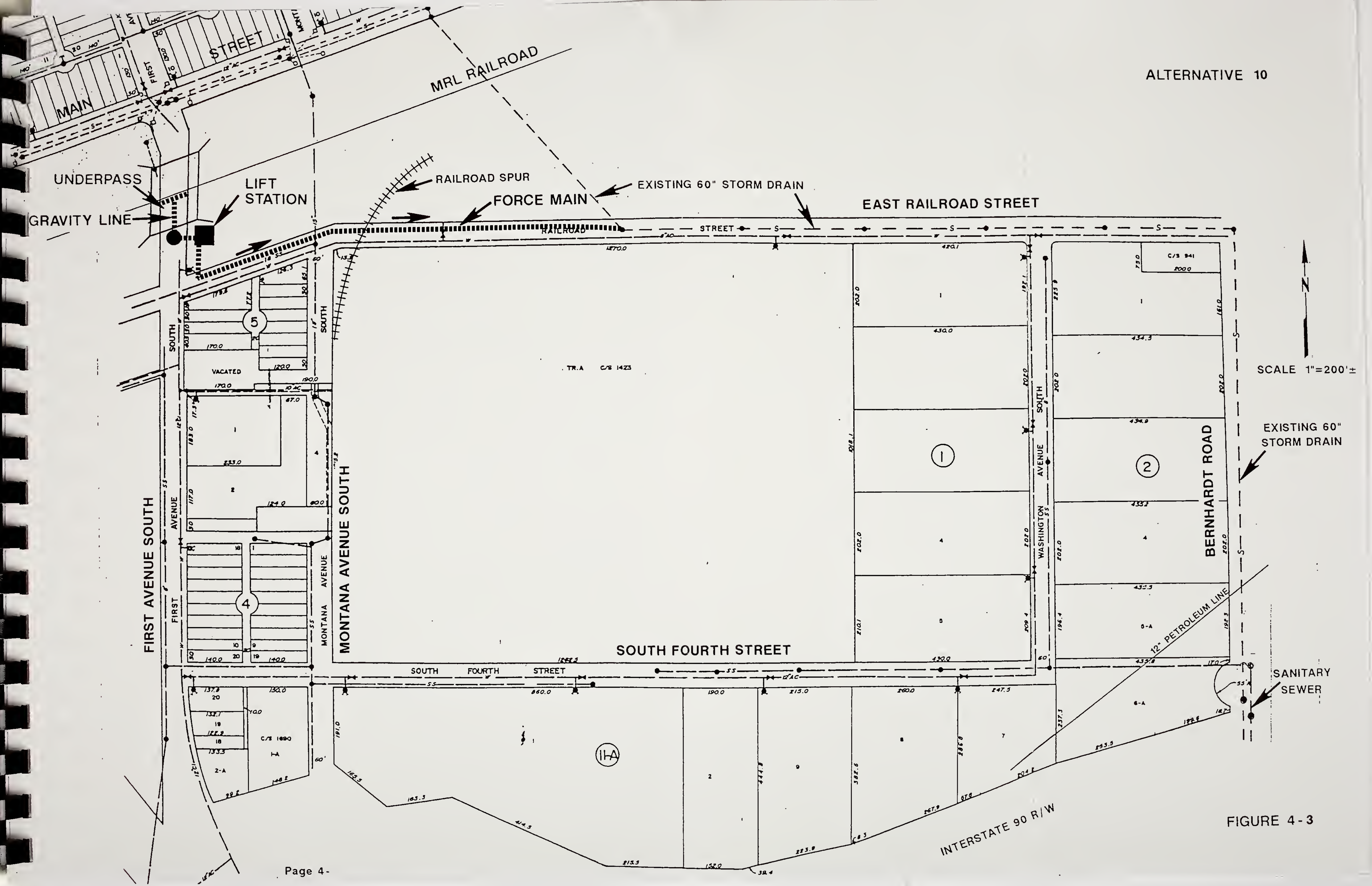


FIGURE 4-3

- **Disadvantages -** This alternative has the following disadvantages:

  1. A lift station approximately 7.6± to 9.1± m (25-30 feet) deep will be installed, requiring a power source and incur associated power costs.
  2. The lift station construction requires dewatering and special construction methods.
  3. Equipment maintenance and replacement is required for the lift station.
  4. A railroad spur is crossed, which requires boring/jacking the force main under the spur.
  5. Some of the numerous underground utility lines in this proposed project's area will need to be relocated.
  6. Removal and replacement of East Railroad Street pavement for the width of the trench excavation.

## 4.2 ALTERNATIVES NOT EVALUATED IN DETAIL

The following alternatives were presented in the initial Alternative Report and were further reviewed and evaluated by Cenex' second consultant in discussions with the City of Laurel and MDT. These alternatives were not evaluated in further detail for the reasons provided.

- **Alternative 1:** Conversion of the existing sump west of the underpass to a lift station discharging to the 610± mm (24-inch) City storm sewer on Main Street.

- **Alternative 2:** Construction of a new lift station or conversion of the existing sump east of the underpass to a lift station discharging to the 1524± mm (60-inch) City storm sewer on East Railroad Avenue.

- **Alternative 3:** Construction of a new lift station at the manhole north of the Jan's IGA Store discharging to the 1524± mm (60-inch) City storm sewer on East Railroad Avenue.

- **Alternative 4:** Construction of a new lift station at the manhole on South Fourth Street discharging to the adjacent City storm sewer which discharges to the Laurel Drain.

- **Alternative 5:** Construction of a new combination gravity discharge/lift station northeast of the Cenex Tank Farm discharging eastward to the City storm sewer drain ditch.

- **Alternative 6:** Construction of 259± m (850 feet) of 305± mm (12-inch) PVC gravity drain pipe from a new manhole discharging eastward to the City storm sewer drain ditch. (Recommended in conjunction with the construction of a lift station under Alternative 2 or Alternative 3.).

- **Alternative 7:** Construction of a 1859±m (6100 foot) gravity drain system in US Highway #212 and #310 south from the underpass to discharge to the Yellowstone River in conjunction with the Yellowstone River bridge replacement project.

Alternative 1 is not feasible as the City's 610± mm (24-inch) storm drain in Main Street does not have any available capacity for accepting the additional underpass storm drainage.

Alternative 2 recommends the installation of a lift station and a force main discharging in the City's 1524± mm (60-inch) storm drain line in East Railroad Street 290± m (950 feet) east of the underpass.

The initial Alternative Report is vague about the sump/manhole in that it apparently never was found, yet a reference was made that the diameter is about 1.5± m (5 feet). According to MDT's "as-built" plans, the sump is 1.2± m (4 feet) in diameter and 7.6± m (25 feet) deep from the 381± mm (15-inch) clay tile pipe invert to the top of the cover.

Considerable time and effort was spent in trying to locate this sump in the field. A sump in this area has never been found by MDT. The only conclusion that can be made is that this sump was never installed, or if installed was never brought to the surface. The initial Alternative Report discusses modifying this (unlocated) sump and using it as a lift station and/or that it may be advantageous or necessary to construct a second sump adjacent to this (unlocated) sump.

Any type of lift station constructed in this area must be a duplex system with some type of alternate/emergency power source.

One of the major design assumptions used in this alternative, and throughout the initial Alternative Report, is the concept of utilizing the existing 381± mm (15-inch) storm drain line as an exfiltration gallery which would allow dissipation of small to medium storm flows without pumping. The existing 381± mm (15-inch) clay tile pipe is probably so deteriorated, broken and crushed that it is unlikely to have any effect in carrying away storm water from the underpass inlets. The use of 963± m (3160 feet) of existing pipe and the installation of drain lines downstream would not solve the problem.

The drainage of the underpass inlets is dependent on the groundwater level at the time. The ability and effectiveness of this storm drain line rests on fluctuations of the groundwater level.

Alternatives 3, 4, 5 and 6 are all based on similar type design assumptions and concepts which include combinations of the following:

- Utilizing varying lengths of the existing 381± mm (15-inch) storm drain line as an exfiltration gallery.
- Installation of small size PVC pipe [305± to 381± mm (12"-15")] for gravity drainage.
- Construction of a lift station at different locations for each alternative.

No further detailed evaluation of these alternatives was made due to the following general design and construction considerations and conditions:

- The existing 381± mm (15-inch) storm drain line is deteriorated and not usable as a drainage conveyance system.
- Replacement of the 381± mm (15-inch) storm drain line would be cost prohibitive. This is due to its depth which varies from 4.6± to 6.1± m (15-20 feet) and the groundwater level which varies from 1.2± to 2.4± m (4-8 feet) above the top of the pipe.

- Utilizing the City's storm drainage ditches is not feasible or practicable.
- The storm drain line goes under existing structures, parking lots, streets, Interstate I-90 ditches and a large section of the Cenex Tank Farm.

Alternative 7 was eliminated from further consideration for the following reasons:

- The anticipated depth of the gravity line would be 4.6± to 6.1± m (15-20 feet).
- There would be long-term traffic disruption along the full length of South First Avenue.
- There would be long-term disruption to normal business activities through the corridor.
- Construction would result in a new subsurface utility in near proximity to the Cenex property located on both sides of South First Avenue.
- Construction would require relocation of numerous existing subsurface utilities within the corridor.
- The estimated cost of this alternative ($1,220,000) was determined to be prohibitive.

## 4.3 SUMMARY OF ACTION ALTERNATIVES

Appropriate environmental review and surveys were performed for the three (3) "action alternatives" for the construction of a new storm drain system to replace the existing 60-year old system. Each of the action alternatives directs storm water from the railroad underpass in downtown Laurel to an existing city storm drain, and ultimately to the Yellowstone River.

Alterative 8 would require construction from the underpass east along East Railroad Avenue for about 122± m (400 feet), then south about 305± m (1000 feet) along a street easement (Montana Avenue) to South Fourth Street, and then about 640± m (2100 feet)

east to the existing storm drain system which runs parallel to Bernhardt Road. The estimated cost of construction of Alternative 8 is $459,500.

Alternative 9 would require construction from the underpass south about 305± m (1000 feet) along South First Avenue to the intersection with South Fourth Street, and then east about 732± m (2400 feet) to the existing storm drain identified in Alternative 8. The estimated cost of construction of Alternative 9 is $485,500.

Alternative 10 involves construction and storm drain installation from the underpass area east for about 274± m (900 feet) connecting to an existing storm drain system beneath East Railroad Avenue. The planned construction requires excavation of trenches for pipe and pits for connections either within the streets/easements or immediately adjacent to them. The estimated cost of construction of Alternative 10 is $252,000.

## 4.4 THE PREFERRED ALTERNATIVE

With the concurrence of MDT, the City of Laurel and Cenex, Alternative 10 has been identified as the preferred alternative for the following reasons:

- Minimum traffic disruption and rerouting.
- Minimum amount of water line, sanitary sewer line and other utilities conflicts.
- Alignment of the force main is more flexible in avoiding critical underground utility conflicts.
- Installation of the fairly shallow force main does not require costly construction methods.
- This is the least costly action alternative.

## 5.0 AFFECTED ENVIRONMENT AND IMPACTS

### 5.1 HAZARDOUS MATERIALS

Cenex' second consultant was retained to review available public records related to hazardous/regulated substance incidents or releases within the proposed project area. The objective of the hazardous materials records review is to identify potential areas within a proposed construction project where contaminants may be encountered. Conclusions are based on a review of available federal, state and local public records of reported or suspected spills or releases of regulated substances. Such information can be used by project designers to alert project owners and bidders of special precautions which may be necessary during construction. This consultant's report is attached as Appendix A.

Based on that consultant's review of available public records, there is a slight possibility of encountering petroleum-contaminated groundwater in the vicinity of the underpass. A reported leaking underground fuel storage tank (UST) is located by the gas station at 410 West Main Street. Other reported leaking USTs in the immediate area have either been cleaned up or are located in a down gradient position from the storm drain alternative locations. This conclusion is based on a review of available public records and does not consider unreported or unknown spills or releases of regulated materials. Drilling tests found no hydrocarbon contaminants in the vicinity of this proposed project.

Plugging of the existing storm drain line after completion of the proposed system will not result in the migration of unidentified or future contaminants toward the underpass with the groundwater as was discussed in Section 2.0. Analyses of the groundwater in the existing line indicates there are currently no metals, polynuclear aromatic hydrocarbons (PAHs) or semi volatile organic contamination of the groundwater between the underpass and Interstate 90. This analysis supports the conclusions of the consultant's records review in Appendix A. To provide additional assurance against the unlikely migration of contaminants from the Cenex property northward along the abandoned storm drain line, a bentonite collar will be installed around the line near the northern boundary of the Cenex property.

MDT contacted the Montana Power Company (MPCo) to inquire about the possibility of polychlorinated byphenyls (PCBs) located at the Laurel sub-station on the northwest corner of the intersection of South First Avenue and East Railroad Street. MPCo advised there are three transformers and other electrical equipment at the site which contain less than 500 ppm PCBs. There are no known PCBs in the soil at or near the site. Because

the PCBs are contained in the transformers and other equipment and are not in the soils, there should be no hazardous material concerns when the proposed storm drain line is being installed.

In the unlikely event that contaminated or suspect subsurface materials are encountered during construction of the project, the contractor will refer to the appropriate Special Provision in the contract documents for the project. The Special Provision will require the contractor to handle and manage such contaminated materials in accordance with current state standards and procedures.

## 5.2 CULTURAL RESOURCES

A cultural resources consultant was retained to conduct a records review and pedestrian survey of the action alternatives for the possible existence of cultural resources. The routes of the three action alternatives are within a modern commercial area. Construction of streets, railroad spurs, irrigation ditches and commercial development have thoroughly disturbed the area. No prehistoric archaeological sites were discovered. Remnants of the Italian Ditch are located southwest of Alternative 9. The Italian Ditch is covered under MDT's Programmatic Agreement (PA) on Historic Irrigation Features between the (former) MDOH, FHWA, SHPO and the ACHP. This PA concerns proposed highway project's impacts on historic irrigation features and no determination of NRHP eligibility for these will be necessary. Section 106 of the National Historic Preservation Act has been complied with pursuant to the PA. There are no impacts to this historic feature by any of the action alternatives of the proposed storm drain construction.

North of the underpass is the old commercial district of Laurel. The separation of the proposed project by the underpass and the Montana Rail Link railroad tracks indicates the proposed project would have no impact on these historic properties. No other historic properties are within or adjacent to the area of potential effect. SHPO concurred that no cultural resources sites exist in this proposed project's area on February 26, 1996. A copy of MDT's letter with SHPO's stamp of concurrence is in Appendix B. A copy of this proposed project's cultural resources report is attached as Appendix B.

## 5.3 THREATENED OR ENDANGERED SPECIES

A field survey of the action alternatives was conducted by Cenex' second consultant and each route was surveyed along their entire length. Neither habitat nor evidence of threatened or endangered species were observed. It was concluded that none of the

action alternatives would affect threatened or endangered species or their critical habitat. A copy of the Threatened and Endangered Species report is attached as Appendix C.

## 5.4 WETLANDS

A field survey of the action alternatives was conducted by Cenex' second consultant and each route was surveyed along their entire length watching for signs of wetland vegetation. Two wetlands, both essentially fringes along drainage ditches, were identified. Wetland 1 includes the irrigation ditch that is located along the north side of East Railroad Avenue. Wetland 2 is a narrow north-south drainage ditch which parallels Bernhardt Road at the end of Alternatives 8 and 9. Both wetlands would be rated as "Category IV" (low value) sites on the MDT wetland site evaluation form due to their limited size, low habitat value, lack of diversity and urban location.

Installation of the proposed storm drain line from the lift station to East Railroad Street under each alternative would have a temporary impact on Wetland 1 via an excavation across the ditch. The construction disturbs far less than 0.05± ha (0.01± acre) of Wetland 1.

It is estimated that well under 0.05± ha (0.01± acre) of Wetland 2 would be temporarily disturbed by construction activities under Alternatives 8 or 9. The site is not affected under Alternative 10.

No significant wetland impacts would result from any of the action alternatives under consideration. Disturbed ditches would be reseeded and restored to their original contours. Consequently, no compensatory mitigation is recommended.

## 5.5 AIR QUALITY

This proposed project is located within the sulfur dioxide ($SO_2$) "non-attainment area" of Yellowstone County under 40 CFR 81.327, as amended. However, vehicle and construction equipment emissions have negligible effects on the amount of total $SO_2$. Therefore, construction of the proposed storm drain project, regardless of alternative, would not substantially increase $SO_2$ within the non-attainment airshed.

This proposed project is located in an "unclassifiable"/attainment area of Montana for carbon monoxide (CO) and dust particulates (PM-10) under 40 CFR 81.327, as amended. As such, this proposed project is not covered by the US Environmental Protection

Agency's Final Rule of November 24, 1993 on air quality conformity. therefore, this proposed project complies with Section 176(c) of the Clean Air Act (42 U.S.C. 7521(a)), as amended.

## 5.6 SOILS AND GEOLOGY

This portion of the City of Laurel is situated in the geologic flood plain of the Yellowstone River. An assessment of the soil types and conditions within the proposed project area was prepared using data from a geotechnical investigation conducted in August 1995 for a similar project located within four blocks west of South First Avenue. This investigation encountered alluvial clays underlain by gravel alluvium. Alluvial clay consisting of fat clay, lean clay and sandy lean clay was encountered to depths ranging from 1.8± to 3.0± m (6-10 feet). Gravel alluvium consisting of clayey gravel and poorly graded gravel with sand was encountered beneath the alluvial clay. Groundwater was observed at depths ranging from 2.7± to 3.0± m (9-10 feet).

It is believed the subsurface materials found within the proposed project area are virtually the same as those encountered above. There is nothing to indicate the soil and geology which would be encountered during planned construction of the new storm drain system would pose any environmental or construction impediments under any of the action alternatives.

## 5.7 SOCIAL AND ECONOMIC

South First Avenue (US Highway #212 and #310) passing through the Laurel Underpass is the primary north-south thoroughfare connecting the northern and southern portions of the City of Laurel. Reliable transit through the underpass is of extreme importance to the residents and businesses in the community. Pumping accumulated water during precipitation events has led to increased maintenance costs (both equipment and man-hours) to MDT. There have been occasions when the underpass was closed for brief periods due to high water levels. There have also been numerous occasions when MDT had to pump accumulated storm water runoff out of the underpass to avoid closing the underpass to through traffic. This is due to the apparent failure over time of the existing storm drainage system serving this underpass,

Construction of the proposed new storm drainage system would alleviate the increasing water accumulation problems at the underpass. This would produce positive benefits in the form of reduced maintenance costs for MDT as well as increased reliability of

vehicular traffic through the underpass regardless of weather conditions. This would be especially true for the transit of emergency vehicles.

During construction under any of the action alternatives, there would be a short-term closure of the underpass. Construction under Alternative 9 results in a short-term disruption of traffic and inconvenience to businesses along South First Avenue between East Railroad Street and South Fourth Street. Both Alternative 8 and 9 would cause short-term re-routing of traffic and inconvenience to the limited businesses on South Fourth Street. Alternative 10 would result in the least short-term disruption of traffic and business inconvenience due to the significantly lesser construction on East Railroad Street than under either of the other action alternatives.

While it is acknowledged the construction of the proposed storm drain will result in some short-term inconvenience to local businesses and normal traffic patterns, these social and economic impacts are considered to be minor and temporary.

## 5.8 RIGHT-OF-WAY AND LAND USE

The proposed project area, as defined by the total of action alternatives 8, 9 and 10, is adjacent to and surrounded by light and medium commercial land uses. With the exception of the lift station, construction activities under each action alternative will be limited to existing roadways which have been established and in use for many years.

For each action alternative, construction of the proposed gravity line would be within and adjacent to the underpass and then connected to a lift station. This portion of the project will be totally within the US Highway #212 and #310 right-of-way. Extension of the gravity line south on South First Avenue to South Fourth Street (as indicated in Alternative 9) would also be within the US Highway #212 and #310 right-of-way.

The lift station and a short section of the force main from the lift station to East Railroad Street will be constructed within the Montana Rail Link right-of-way. This construction will occur immediately west of the Montana Power Company substation, also within the MRL right-of-way.

The remainder of the force main construction, as indicated in Alternatives 8 and 10, will occur on City of Laurel property.

It will be necessary to obtain the appropriate right-of-way agreements and/or easements from MDT, the MRL and the City of Laurel prior to the start of construction. To this end, discussions have been initiated with the parties. Figure 5-1 shows the of existing right-of-way and property ownership in the proposed project area.

Upon completion of the proposed project, which includes plugging of the existing storm drain line, MDT will extinguish its easements for the existing storm drain line from the Laurel Underpass to the Yellowstone River upon request of the landowner. Cenex will assume responsibility for those MDT easements for the existing storm drain line from Interstate 90 to the Yellowstone River for that section of the storm drain line crossing their property.

## 5.9 CONSTRUCTION

Construction related activities will result in some short-term impacts which cannot be avoided. The proposed project will cause a short-term impact to the normal vehicular traffic pattern through the Laurel Underpass and on one or two connecting streets. These impacts will be temporary and should last only for the duration of the construction activities, which is anticipated to last between two and four months.

Possible impacts include the following:

- temporary closure of the underpass (approximately two weeks)
- detour of vehicular traffic while the underpass is closed
- inconvenience to local businesses due to temporary traffic pattern disruptions
- dust from construction equipment activities

Construction impacts and inconveniences would be greatest under Alternative 9 and least under Alternative 10, with Alternative 8 in between.

Impacts will be minimized to the extent practical through proper construction practices. During closure of the underpass, normal traffic will be routed west from South First Avenue to the at-grade railroad crossing at Fifth Avenue and then to West Main Street. Provisions will be made to accommodate emergency vehicles through the underpass to the extent possible. A traffic control plan will be developed to minimize inconvenience to motorists and businesses during construction. Traffic delays will be minimized by planning and scheduling.

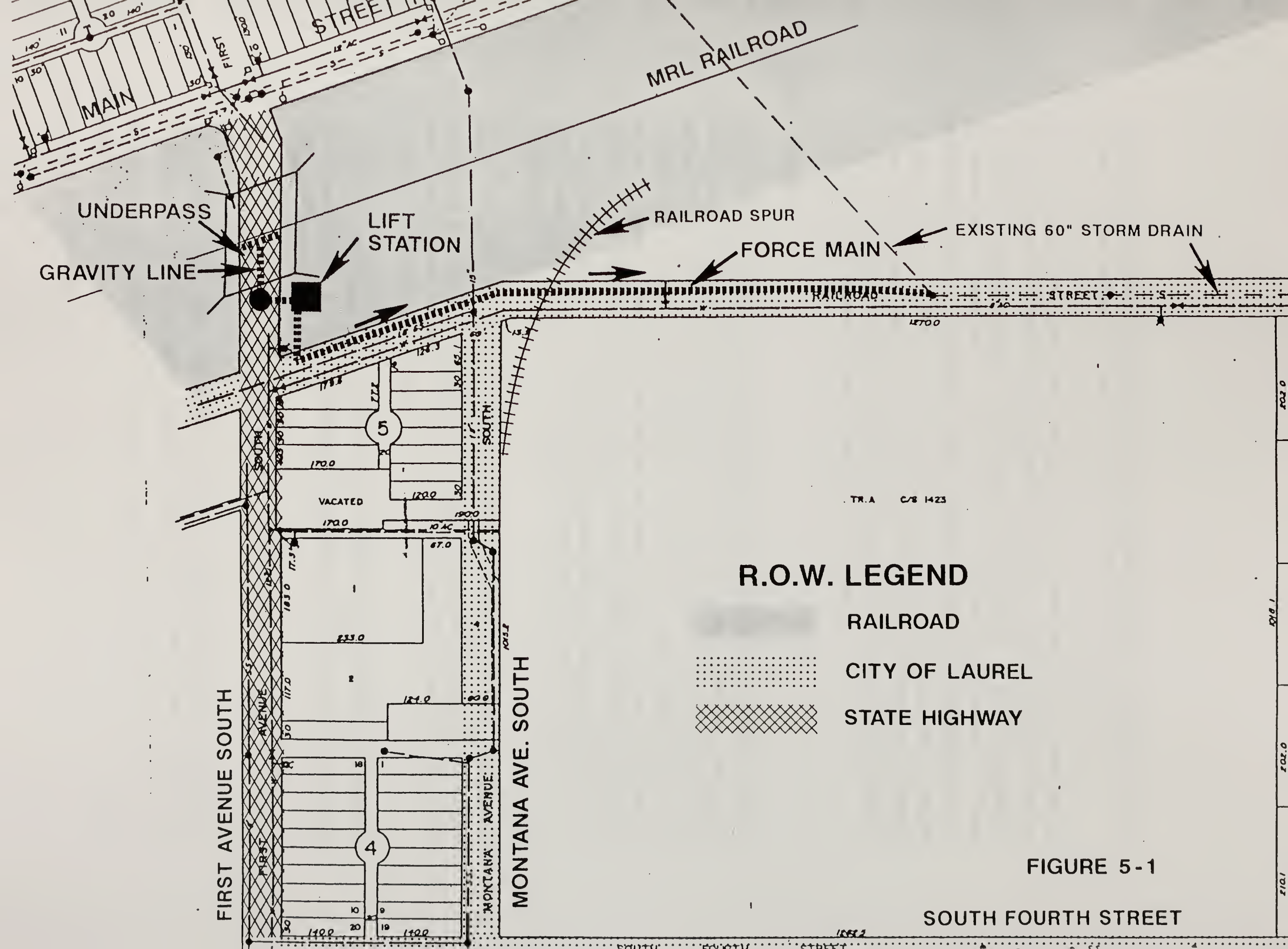


FIGURE 5-1

R.O.W. LEGEND
RAILROAD
CITY OF LAUREL
STATE HIGHWAY
MRL RAILROAD
RAILROAD SPUR
EXISTING 60" STORM DRAIN
FORCE MAIN
LIFT STATION
UNDERPASS
GRAVITY LINE
MAIN STREET
FIRST AVENUE SOUTH
MONTANA AVE. SOUTH
SOUTH FOURTH STREET
RAILROAD STREET
VACATED
TR. A C/S 1423
5
4

Dust will be controlled by watering or other acceptable methods. Construction related erosion will be controlled in accordance with the storm water discharge permit.

MDT will re-establish a permanent, desirable vegetation community along all areas beyond paved surfaces disturbed by the proposed construction. This revegetation will be completed in accordance with 7-22-2152 and 60-2-208, MCA. A set of revegetation guidelines will be developed by MDT that must be followed by the contractor. These specifications include instructions on seeding methods, dates, mix components and the types and amounts of fertilizer and mulch. Seed mixtures will include a variety of species to assure that areas disturbed by construction are immediately stabilized by vegetative cover. The Seeding Special Provisions developed for the proposed project will be forwarded to Yellowstone County's Weed Board for approval.

## 5.10 PERMITS

The Montana Pollutant Discharge Elimination System (MPDES) regulations require a storm water discharge permit for any construction activity in which clearing, grading and excavation will result in the disturbance of more than five acres or the disturbance of more than 0.4± ha (1.0 acre) if located within 31± m (100 feet) of a surface water body. None of this proposed projects action alternatives will have 0.4± ha (1.0 acre) of disturbance. Therefore, neither Alternatives 8, 9 nor 10 will need a MPDES erosion control permit. This proposed project is therefore in compliance with the Montana Department of Environmental Quality's Water Quality Division (MDEQ/WQD) MPDES regulations (Arm 16.20.1314).

It will be necessary for this proposed project's contractor to obtain a construction dewatering permit from the MDEQ/WQD. This permit will allow the contractor to manage and maintain open excavations during project construction by pumping out intercepted groundwater and\or surface runoff.

A portion of the proposed project area is within a FEMA designated floodplain. Therefore, it will be necessary to obtain a Floodplain Development Permit from the City of Laurel. Refer to section 5.11 below.

## 5.11 FLOODPLAINS

A floodplain has been delineated under the Federal Emergency Management Administration (FEMA) along the Yellowstone River (south of the proposed project area)

and within portions of the City of Laurel, including the majority of the proposed project area (see Figure 5-2). The City of Laurel administers the floodplain within the City for FEMA. All of the action alternatives would involve construction activity in the delineated 500-year floodplain south of the underpass within the City. The proposed project would not affect the 500-year flood level and would not increase flood liability hazards from its construction. Therefore, this proposed project is considered to be in compliance with EO #11988.

## 5.12 FARMLAND

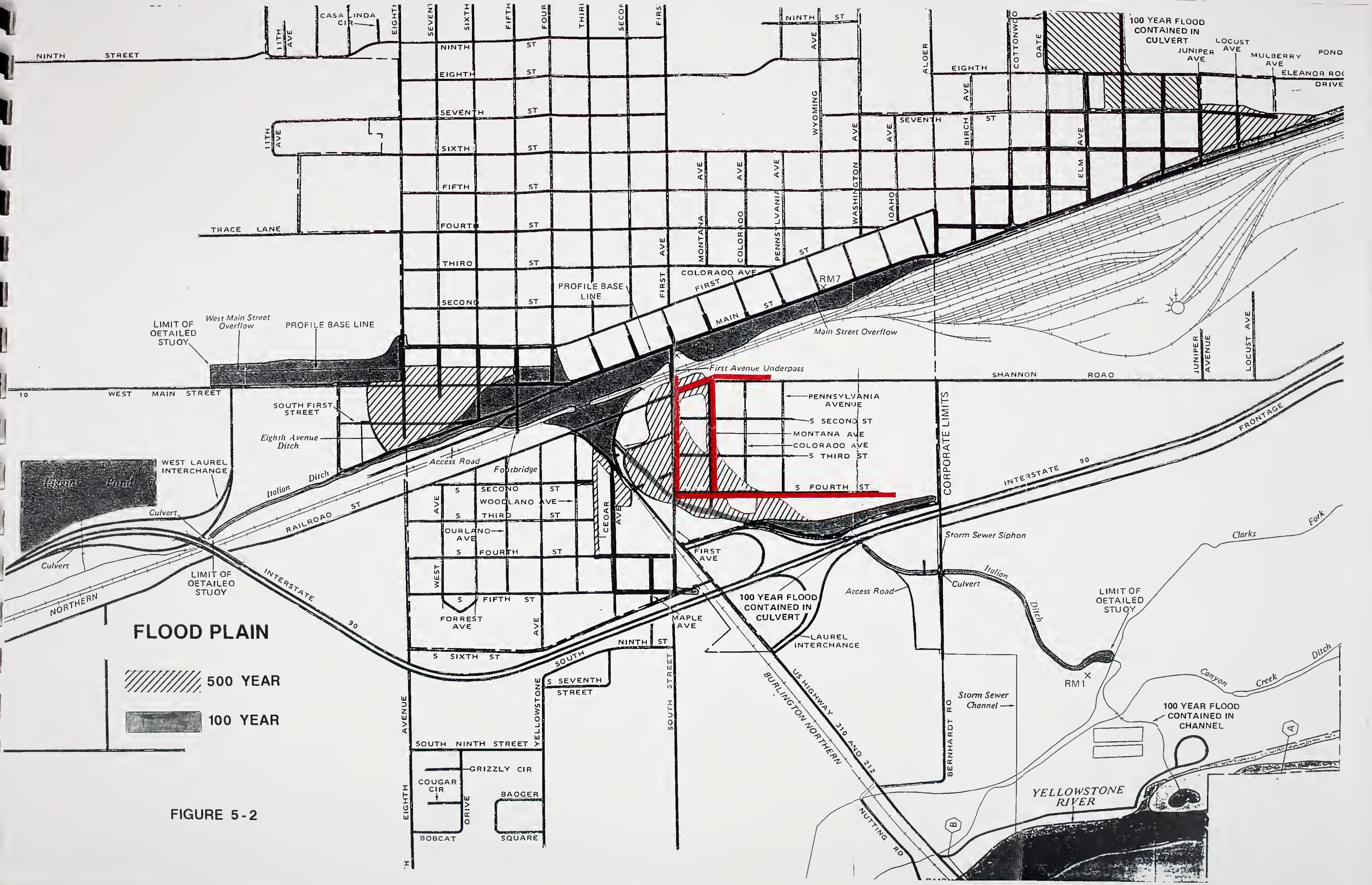
The proposed project's action alternatives are limited to construction activities within established railroad, road and/or street rights-of-way. All of this proposed project's action alternatives are within an "urban/built-up area" on the "important Farmlands" map for Yellowstone County. The US Department of Agriculture's Natural Resource Conservation Service regards such areas as not containing prime, unique, statewide or locally important farmlands. There will be no project related impacts on existing or future farmlands under any of the action alternatives.

## 5.13 NOISE

Due to the nature of the proposed project, it was determined that a noise analysis was not necessary. Existing sources of noise are limited to vehicular traffic and railroad traffic in the immediate area. Noise levels will remain within the FHWA's Noise Abatement Criteria under 23 CFR Part 772. There are no residential areas in near proximity to the proposed project area. Additional noise generated by construction equipment during the short duration of the proposed project is considered to be insignificant.

## 5.14 RELOCATION

No concentrations of minorities and/or low-income groups have been identified within the proposed project area. Executive Order #12895 (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations) has been observed for this proposed project. Implementation of any of the action alternatives will not create disproportionately high and/or adverse impacts on the health or environment of minority and/or low-income populations.



# FLOOD PLAIN

▨ 500 YEAR

▩ 100 YEAR

FIGURE 5-2

## 5.15 PEDESTRIANS AND BICYCLISTS

Existing pedestrian and bicyclist traffic which uses the underpass is considered to be minimal to moderate depending on the time of year and weather conditions. Sidewalks are located on the east and west sides of the roadway through the underpass to accommodate such traffic. During construction activities within the underpass, the eastern sidewalk will be closed to pedestrian and bicycle traffic for approximately two weeks. However, the western sidewalk will remain unaffected by the construction.

There is a sidewalk along the east side of South First Avenue between East Railroad Street and South Fourth Street to accommodate pedestrian traffic. There is no sidewalk on the west side of South First Avenue. Construction under Alternative 9 would result in short-term inconvenience to pedestrians and bicyclists along South First Avenue while construction was underway. Pedestrian and bicycle traffic along both East Railroad Street and South Fourth Street is very minimal. The same is true for Montana Avenue South which is no longer a throughway. Therefore, there will be no significant impact to pedestrians and/or bicyclists during construction of the proposed project under any of the action alternatives.

## 5.16 WATER QUALITY

Surface water in the proposed project area is limited to the small irrigation ditch on the north side of East Railroad Street and the open storm drain at the terminus of Alternative 8 and 9. The Yellowstone River is located more than 1.6± km (1.0 mile) south of the area. The Italian Ditch is located west of South First Avenue and south of South Fourth Street. Neither the Yellowstone River nor the Italian Ditch would be impacted by the proposed project. Some short-term construction related water quality impacts may occur at the small irrigation ditch along East Railroad Street under any alternative or at the open storm drain under Alternative 8 or 9. However, these impacts would be minimal and would only occur if water were actually in the ditches at the time of construction.

Groundwater is found at approximately 3.0± m (10 feet) below ground surface throughout the proposed project area. This groundwater will be encountered during construction activities at the underpass and excavation for the lift station. It will be necessary to pump intercepted groundwater from these excavations under the auspices of the construction dewatering permit noted in Section 5.10 above. This water would be discharged to the nearest storm drain provided it is not contaminated.

As was noted in Section 2.0, existing data shows a clear groundwater gradient from the underpass area to the river. Monitoring data from Cenex actually indicates the groundwater is flowing easterly to the Yellowstone River through the alluvial gravels. The available data and information suggests any rise in the groundwater level along the existing storm drain system will not be sufficient to reverse the groundwater gradient. Therefore, abandonment and plugging of the existing system will not result in groundwater flow toward the underpass -- it will continue to flow to the Yellowstone River. Analyses of the groundwater between the underpass and Interstate 90 shows the groundwater to be currently uncontamianted.

Consideration has been given to the possibility of hazardous materials being introduced into the underpass in the form of a spill or vehicle accident. The storm water collection sump will be physically separated from the groundwater. Both storm water and groundwater will be pumped to the wet well at the lift station through separate pipes. The storm water pipe will be fitted with a large plug valve between the sump and the wet well. In the event of a catastrophic hazardous materials spill, the plug valve will be closed to prevent the materials from entering the wet well and being pumped to the storm drain system. In addition, the pumps at the lift station can be shut down to allow the spilled materials to be cleaned up and the sump, pipes and wet well to be decontaminated.

Construction of the gravity lines under Alternatives 8 or 9 and the force mains under Alternatives 8 or 10 should not intercept groundwater. If groundwater is encountered, it will be handled in the same way as that described for groundwater around the underpass and lift station.

## 5.17 WATER BODY MODIFICATION AND WILDLIFE

There will be negligible short-term impacts to minor wetlands as noted in Section 5.4, preceding. No other modifications to streams or bodies of water used for recreation, water supply or other purposes are contemplated during construction of the proposed project under any of the action alternatives. In addition, the proposed project will not result in the loss, degradation or modification of any aquatic or terrestrial habitat.

## 5.18 VISUAL

The existing visual environment will not be permanently impacted by the proposed project under any of the action alternatives. All of the storm drain system will be located underground, including the proposed lift station. A small equipment building may be

located at the site of the lift station, adjacent to the existing Montana Power Substation on the northeast corner of East Railroad Street and South First Avenue. With the exception of the temporary presence of construction equipment and an open excavation during actual construction activities, there will be no substantial change in the visual environment.

## 6.0 CUMULATIVE AND SECONDARY IMPACTS

As required in the Environmental Documentation Process, it is necessary to consider the potential cumulative and secondary environmental impacts of this proposed project on other known or planned construction projects in the area. In addition, it is necessary to evaluate potential impacts of these other projects on the proposed storm drain project. Other projects include those under the jurisdiction of MDT, the City of Laurel and Cenex.

### 6.1 MDT Projects

MDT currently has one ongoing, and four (4) proposed projects in the general Laurel area, not including this proposed storm drain project. The nearest of these is the Yellowstone River bridge replacement south of Laurel [project no. BR 4-2(12)54 F; C#0834], which was recently "let" to construction. Of the storm drain line alternatives, only Alternative 7 would have had any potential impact on the bridge project and then only if the construction on the two projects was concurrent. However, Alternative 7 has been eliminated as a viable option.

The other four (4) proposed MDT projects include the following:

1) Flashers on US Highway 212 at Laurel and S-429 at Billings (STPHS 0002(190); PMS C#2960) -- Spring 1996
2) Bridge replacement on the Clark's Fork of the Yellowstone River 4.8± km (3 miles) south of Laurel (BR 9056(25); PMS C#2176) -- Spring 1996
3) Mossmain to Billings-overlay (IM 90-8(134)439; PMS C#2805) -- Spring 1998
4) Mossmain scales-revise approaches and lights (IR 90-8(134)439; PMS C#1797) -- Spring 1998

These proposed MDT projects are all more than 1.6± km (1.0 mile) from the proposed storm drain project. Although each of these projects will or may have some affect on the environment in their respective immediate area (i.e., wetlands, wildlife, farmlands, air quality, noise, etc.), none of these environments are associated with or connected to those of the proposed storm drain project. In addition, the two Mossmain projects are not scheduled for construction until 1998, or two years after planned construction of the proposed storm drain project. Therefore, none of these projects will have any cumulative or secondary environmental impacts on this proposed action. Likewise, this proposed storm drain project will have no cumulative or secondary environmental impacts on these other MDT projects.

## 6.2 City of Laurel Projects

The Public Works Department of the City of Laurel has identified three (3) near-term construction projects which have been reviewed with respect to possible cumulative or secondary environmental impacts on the proposed Laurel Underpass Storm Drain project. The City projects include the following:

1) Waterline replacement associated with MDT Yellowstone Bridge replacement south of Laurel described in Section 6.1 above.
2) 1996/1997 modifications to the Laurel Water Treatment Plant located adjacent to the Yellowstone River immediately east of the US Highway 212 bridge.
3) Waterline replacement from South Fourth Street to East Railroad Street on South First Avenue; and waterline replacement from the intersection of South First Avenue and South Fourth Street to West Main Street and Fifth Avenue.

The first two City projects are located more than 0.8± km (0.5 mile) south of the proposed storm drain project. As with the MDT projects discussed above, these City projects will not affect the same environments as those associated with the proposed storm drain project. There may some additional short-term inconvenience for motorists on US Highway 212 and 310 due to the combined construction activities. Therefore, these projects will not have any cumulative or secondary environmental impacts on this proposed action. Likewise, this proposed storm drain project will have no cumulative or secondary environmental impacts on these other City projects.

The waterline replacement along South First Avenue between South Fourth Street and East Railroad Street is scheduled to occur during the summer of 1996. It is possible that work on this project and on the proposed storm drain project will occur at the same time resulting in simultaneous construction activities at and near the intersection of South First Avenue and East Railroad Street. It will be necessary for the parties involved (i.e., the contractors, City of Laurel and MDT) to coordinate activities in order to minimize potential problems associated with vehicular traffic and pedestrian safety. Because both projects will be completed within a developed, urbanized area along existing thoroughfares, no adverse cumulative or secondary environmental impacts will then result from this situation.

## 6.3 Cenex Projects

Over the next three years, Cenex has identified a number of general plant improvement projects. All of these projects are totally within the Cenex Refinery property site which is located at least 0.8± km (0.5 mile) from the proposed storm drain project. The planned Cenex projects will not adversely impact existing environmental systems or resources beyond those impacts already incurred historically. Therefore, none of these projects will have any cumulative environmental impacts on this proposed action. Likewise, this proposed storm drain project will have no cumulative environmental impacts on the planned Cenex projects.

## 7.0 COMMENTS AND COORDINATION

7.1 During the course of the development and preliminary design of the proposed Laurel Underpass Storm Drain project, meetings and discussions were held by and between the parties involved in the project. This included MDT, the City of Laurel, Cenex and its consultants. The following is a summary of those meetings and discussions. Copies of correspondence pertinent to this proposed project are provided in Appendix D.

A meeting was held on July 21, 1995 in the Cenex office in Laurel with representatives of the City of Laurel, MDT, Cenex and their consultant to review and discuss the general project work scope. At this time, the City of Laurel asked MDT to consider an alternative which would result in a storm drain in South Fourth Street. Various alternatives were to be included in the study/report.

On August 8, 1995, a request was made to the City of Laurel for permission to connect the underpass storm water discharge to the existing system at East Railroad Street and the extension of Colorado Street.

On August 16, 1995, Jim Flisrand, City of Laurel Director of Public Works, advised that the Laurel City Council had not approved adding the underpass discharge to the City's 1524± mm (60-inch) storm drain system in East Railroad Street.

A meeting was held on August 24, 1995 in the Cenex office in Laurel with representatives of the City of Laurel, MDT, Cenex and its consultant to review the initial study/report. Alternatives 8, 9 and 10 were based on previous studies and the understanding that the City of Laurel would allow discharge from the underpass into the 1524± mm (60-inch) storm drain line under East Railroad Street. Cenex' consultant was requested to conduct a storm water runoff analysis of the underpass and adjacent area to determine the current storm water discharge into the 1524± mm (60-inch) storm drain system and the actual capacity of this line.

On September 19, 1995, a meeting was held with Jim Flisrand to review the Laurel City Council's conditions for allowing the underpass storm water discharge to the 1524± mm (60-inch) storm drain system. The City Council required a demonstration using runoff calculations that shows the additional underpass runoff would not cause a problem in the downtown business area.

In a letter to Cenex' consultant dated October 12, 1995, the City of Laurel expressed further concerns regarding allowing the storm water discharge from the underpass into the City's existing storm drain system.

Representatives of MDT and Cenex' consultant attended the October 17, 1995 meeting of the Laurel City Council to discuss MDT's response to the main concerns expressed by the Council in earlier meetings and correspondence. During this meeting, the Council indicated it would have an agreement including the Council's requirements and conditions for connection to the existing 1524± mm (60-inch) storm drain system at the next Council meeting.

Representatives of MDT, Cenex and its consultant attended the November 7, 1995 meeting of the Laurel City Council to review and discuss the Council's agreement. MDT indicated that one requirement of the Council's agreement could not be accepted at this time and would have to be reviewed by MDT office in Helena. The City Council then passed the agreement subject to minor wording changes in the last sentence.

On November 29, 1995, a project review meeting was held in the Cenex office with representatives of MDT, the City of Laurel, Cenex and its consultant. The purpose of the meeting was to bring all parties up to date on the project, discuss project design considerations and details, get right-of-entry permits and easements/right-of-way from Montana Rail Link, schedule the geotechnical/soils investigation, and obtain the City of Laurel's written concurrence for Alternative 10 as the preferred method for handling the underpass storm water problem.

Cenex' consultant received a letter dated December 12, 1995 from the City of Laurel which stated that the City "...concurs with the design concept of Alternative No.10..." which would allow the storm water runoff from the underpass to discharge to the City's existing 1524± mm (60-inch) storm drain system in East Railroad Street.

Cenex' consultant received a letter dated December 21, 1995 from the City of Laurel which stated the City does not have sufficient funds to allow participation in Action Alternatives 8 or 9.

MDT Billings District Office received a letter dated April 9, 1996 from the USEPA Montana Office in Helena, Montana which was signed by Mr. John Wardell, the Director of the Montana Office. In this letter, USEPA requested MDT to do whatever it could to expedite the process in hopes that the project could be completed by this fall (1996).

7.2 Effective public involvement is an intergral part of the Environmental Assessment process and can contribute directly to project development. To provide for public involvement and input, a Public Hearing will be offered by MDT's Billings District No. 5 on this proposed project. The Public Hearing will be scheduled no sooner than 15 days after the EA's approval for distribution and review by the FHWA. The results of the hearing will be summarized in a revised EA. If appropriate, a Finding of No Significant Impact (FONSI) will be issued by the FHWA.

## 8.0 AGENCIES WITH JURISDICTION AND CONTRIBUTORS

### 8.1 List of Agencies with Jurisdiction and/or Permits Required

The City of Laurel will require the following permits and approvals for the construction of the proposed storm drain improvements:

- Street Opening Permit: Digging in any public right-of-way and installation of underground pipe will require a permit issued by the city.
- Building Permit: Construction of the proposed lift station and control/equipment building will require a permit issued by the city.
- Construction Plans: The storm drain construction plans and specifications must be reviewed and approved by the Director of Public Works for the city.

As the property owner, Montana Rail Link (MRL) will require prior approval of a right-of-way for the proposed lift station and the small segment of force main from the lift station to the city street right-of-way.

### 8.2 List of Other Agencies, Persons or Groups Contacted or Who Have Contributed Information

The State Historical Preservation Office (SHPO)

The Montana Power Company

Yellowstone County Planning Office

GCM Services, Inc.

## 9.0 LIST OF PREPARERS

This Environmental Assessment was prepared by the Montana Department of Transportation and the Federal Highway Administration with assistance from Cenex' consultants (Morrison-Maierle Environmental Corp. and Morrison Maierle, Inc.). The primary agencies and individuals involved included those listed below.

Montana Department of Transportation

Joel M. Marshik, P.E., Environmental Services Manager

Federal Highway Administration

Dale W. Paulson, Environmental Coordinator

Morrison-Maierle Environmental Corp.

Chris Cull, C.E.P., Vice President-Regulatory Services

Jeff Berglund, Senior Environmental Scientist

Morrison Maierle, Inc.

Bill Enright, P.E., Municipal Department Director

Fred Sielbach, P.E., Senior Civil Engineer

Mike Grunenfelder, Senior Engineering Technician

### 8.1 Public Comments

Public comments concerning this proposed project should be addressed to either of the agencies at the bottom of this document's signature page. Any comments received will be evaluated to determine the following:

- whether significant impacts occur from any of this proposed project's alternatives;
- if further consideration of the impacts discussed herein is necessary; and/or
- if new issues have arisen that need to be included in this EA.

## 10.0 DISTRIBUTION LIST OF DOCUMENT

The following agencies and corporation are being sent a copy of this EA:

US Department of Transportation
Federal Highway Administration
301 South Park, Drawer #10056
Helena, MT 59626

State Library
Collections Management Librarian
1515 East 6th Avenue
Helena, MT 59620

Montana Environmental Quality Council
Office of the Director
Capitol Post Office Box 215
Helena, MT 59620

City of Laurel
PO Box 10
Laurel, MT 59044
Attention: James E. Flisrand
Director of Public Works

Cenex, Inc.
PO Box 909
Laurel, MT 59044
Attention: Pat Kimmet
Safety Director

# APPENDIX A

# ENVIRONMENTAL RECORDS REVIEW

# ENVIRONMENTAL RECORDS REVIEW
## Laurel Underpass Storm Drain Project

**Prepared By:**

Morrison-Maierle Environmental Corp.
2020 Grand Avenue
Billings, Montana 59102

August 10, 1995
(Revised & Updated December 1995 & March 1996)

## ENVIRONMENTAL RECORDS REVIEW

## KNOWN OR SUSPECTED ENVIRONMENTAL CONDITIONS

Cenex' consultant researched and reviewed available environmental records in an effort to identify known or suspected areas of contamination which might adversely impact construction of the proposed Laurel Underpass Storm Drain System. The research was originally conducted in July,1995 and was based on the public records and reports available at that time.

The proposed project area includes the Laurel Underpass which is shown on the attached Figure 1. The type of soils in the area are sandy alluvium. Ground water in the area generally flows in a southeasterly direction toward the Yellowstone River and is found between 10 and 20 feet below ground surface.

The objective of the records review was to identify potential regulatory deficiencies and/or violations involving hazardous or otherwise regulated materials on or adjacent to the planned construction area and to assess the potential adverse impacts resulting from hazardous materials incidents or releases from previous on-site or nearby activities. TheAmerican Society of Testing & Materials (ASTM) standard provides guidelines for search distances for the various types of sites. The search distance (e.g., adjoining properties, distances to same, etc.) is identified for each database reviewed.

Following is a summary of federal and state environmental data, provided in part through an environmental research consultant, which identifies environmental problems at sites and activities from the public records maintained by the US Environmental Protection Agency (USEPA) and the Montana Department of Environmental Quality (MDEQ).

National Priorities List Database. The National Priorities List (NPL) is the USEPA's database of uncontrolled or abandoned hazardous waste sites identified for priority remedial actions under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), or Superfund.

A search of the May 1995 NPL revealed there are no Superfund sites on the properties within the project area or within the one mile adjacent area.

Comprehensive Environmental Cleanup and Responsibility Act (CECRA). In 1989, the Montana Legislature enacted CECRA for the investigation and cleanup of those sites within Montana not eligible for federal funding under CERCLA but still requiring investigation and possible cleanup.

As mandated by CECRA, the MDEQ maintains an inventory of facilities subject to investigations concerning likely or threatened releases of hazardous substances from those facilities into the environment.

A review of the March 1995 CECRA database shows no record of the properties within the project area or sites within the one mile adjacent area.

USEPA RCRA Database. Through the Resource Conservation and Recovery Act (RCRA) program, the USEPA identifies and tracks hazardous wastes from the point of generation to the point of final disposal ("cradle to grave"). The RCRA Information Database (RCRIS) is a compilation of those regulated facilities which have reported that they either generate, store, treat, transport and/or dispose of hazardous wastes.

A search of the January 1995 RCRIS Database revealed six (6) sites/facilities within the one mile adjacent area as shown in Figure 1. According to information from MDEQ, four (4) of these sites/facilities are registered generators of hazardous waste and include:

1) Interstate Exxon (within the project area)
2) Orchid Dry Cleaners (north of the project area)
3) Laurel Automotive Parts (north of the project area)
4) Commercial Carriers Inc. (northeast of the project area)

These facilities are in compliance with current regulatory requirements related to hazardous waste management and are not considered to be a problem.

The fifth facility is Boise Cascade House Plant located just east of the project area. This is a closed facility with no reported problems. The sixth facility is Fiberglass Structures Inc. located east of the project area. This is s registered RCRA facility but is conditionally exempt due to the fact that the quality of materials managed on-site are not considered hazardous.

Leaking Underground Storage Tank List. The MDEQ maintains an inventory of leaking underground storage tanks (LUSTs) with reported or known release locations which includes closures where contamination was discovered, releases from spills, overfills and/or tank leaks.

A review of the December 23, 1994 MDEQ Leaking UST Sites List revealed no reported leaking USTs or related incidents within the project area. There were eight (8) LUST sites identified within the one-half mile adjacent area (see Figure 1). Six (6) of those sites are as follows:

1) Interstate Exxon
2) US Postal Service (north of the project area)
3) Duane's Conoco (north of the project area)

4) Laurel Cooperative (northeast of the project area)
5) Laurel Servicenter (west of the project area)
6) Commercial Carriers Inc.

According to information from the MDEQ UST Program files, contamination at these locations was cleaned up and no further action is required.

The seventh site is Dean's Sinclair Service which is located north and west of the project area at 410 West Main Street. Information from the MDEQ UST Program files indicates this site has been investigated three times and a remediation proposal has been submitted, but not yet approved. Contaminated ground water resulting from this site could migrate into the project area.

The eighth site is Kwik Way #15 which is located northeast of the project area at 815 East Main Street. Information from the MDEQ UST Program files indicates this site is being investigated. Contaminants generated at this location would probably migrate away from the project area because the ground water flows generally southeast toward the Yellowstone River.

In October 1995 (after the original records review), a leaking UST condition was reported at the Conomart #3 located at 519 West Main Street. Gasoline contamination was noted during the removal of USTs at this site. Information provided by the MDEQ UST Corrective Action Program in Billings (UST 30-Day Release Report) indicates the contamination appears to have been limited to the upper 12-feet of subsurface materials. Approximately 850 cubic yards of contaminated soil materials were excavated and removed for disposal. There is no indication that ground water beneath the site, at a depth of 18-19 feet, was contaminated. Therefore, it may be concluded based on this information that the project area would not be adversely impacted by this contaminated site.

Class V Underground Injection Control (UIC) Wells. As part of the federal Safe Drinking Water Act, the UIC Program was established to protect existing and future underground sources of drinking water from contamination caused by the subsurface disposal of waste fluids into wells. Class V wells are one group of wells in the UIC Program and are generally shallow wells. Common types of Class V wells include sump and separator systems in service station repair bays that discharge to dry wells or leach lines; septic systems used for discharge of industrial, commercial and sanitary wastewater into dry wells or leach lines; and dry wells designed for drainage of storm water runoff from industrial and commercial facilities or areas.

In Montana, the UIC Program is administered by the USEPA. Cenex' consultant contacted the USEPA office in Helena regarding information on listed Class V wells within or adjacent to the project area. Due to federal budget constraints, these files have been transferred to the USEPA

Regional Office in Denver, CO. In a telephone conversation with Ron Zdyb with USEPA in Denver, it was acknowledged that the Montana UIC files have been transferred. Mr. Zdyb advised USEPA conducted a "mail survey" to identify Class V wells in the Billings and Laurel area about two years ago. A number of Class V wells were reported. To the best of his knowledge, there were no reported injection well problems in Laurel. He is sending a list of the known Class V wells in Laurel.

(Report revised and updated December 1995 & March 1996)

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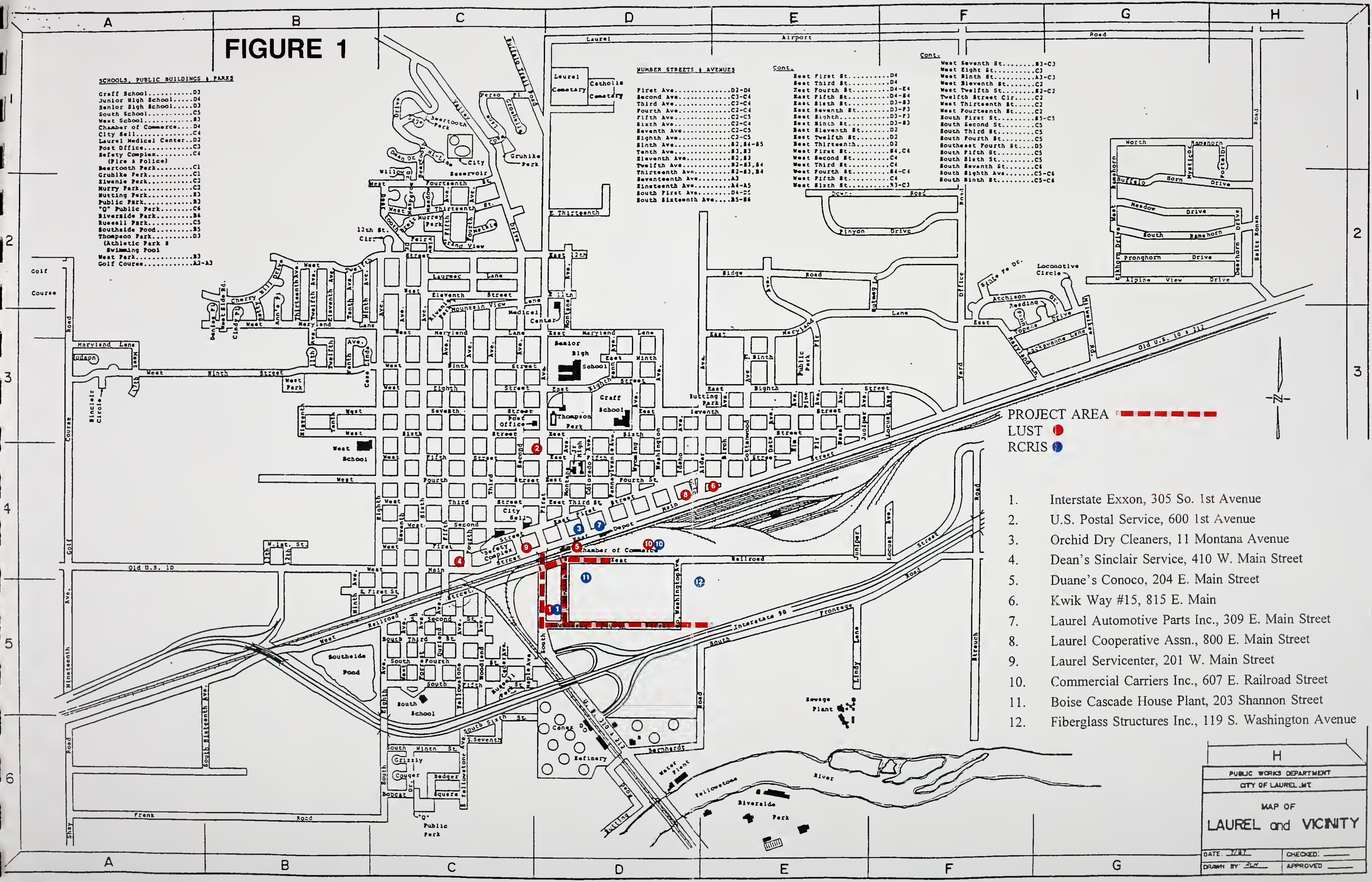
# FIGURE 1



1. Interstate Exxon, 305 So. 1st Avenue
2. U.S. Postal Service, 600 1st Avenue
3. Orchid Dry Cleaners, 11 Montana Avenue
4. Dean's Sinclair Service, 410 W. Main Street
5. Duane's Conoco, 204 E. Main Street
6. Kwik Way #15, 815 E. Main
7. Laurel Automotive Parts Inc., 309 E. Main Street
8. Laurel Cooperative Assn., 800 E. Main Street
9. Laurel Servicenter, 201 W. Main Street
10. Commercial Carriers Inc., 607 E. Railroad Street
11. Boise Cascade House Plant, 203 Shannon Street
12. Fiberglass Structures Inc., 119 S. Washington Avenue

# APPENDIX B

# CULTURAL RESOURCES SURVEY

# A CULTURAL RESOURCE SURVEY AND EVALUATION OF THREE ALTERNATIVE ROUTES FOR A NEW STORM DRAIN SYSTEM IN THE CITY OF LAUREL, YELLOWSTONE COUNTY, MONTANA

Prepared for

Morrison-Maierle
Environmental Corp.
2020 Grand Avenue
Billings, MT 59102

Acting for

CENEX, Inc.
Laurel, Montana

and

Montana Department of Transportation
2701 Prospect
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January 1996

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## INTRODUCTION

CENEX, Inc. and the Montana Department of Transportation (MDT) are jointly sponsoring construction of a new storm drain system in Laurel, Montana to replace an existing complex that is about 60 years old. A cultural resource inventory was conducted along the three alternatives to insure that no significant historic properties would be impacted. GCM Services, Inc. was contacted by the Morrison-Maierle Environmental Corp. on July 31, 1995 and retained to conduct the cultural resource investigation.

A site files and records search was performed by Leanne Kurtz of the State Historic Preservation Office and Erin Driscoll of Archaeological Records at the University of Montana on August 13, 1995. Appropriate Government Land Office maps were inspected at the Bureau of Land Management State Office, and the cultural resource survey was conducted by Wilfred M. Husted on August 4, 1995 and January 3, 1996. Jon Axline, historian with MDT was consulted regarding specific project concern on December 27, 1995. The report of investigation was prepared by Wilfred M. Husted and edited by Dr. Lynn Fredlund.

## MANAGEMENT SUMMARY

The cultural resource survey of three alternative routes for a new storm drain system in the city of Laurel is within a modern commercial area. Most all areas which are not currently occupied by buildings or structures have been disturbed by the development. Approximately 5,800 feet of potential storm drain routing and a proposed lift station location were inspected. No prehistoric archaeological sites were discovered. Remnants of the Italian Ditch (24YL663) are just southwest of Alternative 9. The Italian Ditch, one of a number of irrigation systems in the Yellowstone valley around Laurel, was recommended eligible to the NRHP under Criterion A (Munson 1995). There will be no effect to this historic feature by any of the Alternatives of the proposed storm drain construction.

North of the underpass, which is north of the lift station and area of potential effect, on First Avenue South is the old commercial district of Laurel. This area could potentially be a historic district. The separation of the proposed action by the underpass and the Montana Rail Link/Burlington Northern Railroad tracks indicates the action will have no effect on these historic properties. No other historic properties are within or adjacent to the area of potential effect. Installation of any of the alternatives will have no effect on significant cultural resources.

## PROJECT LOCATION AND DESCRIPTION

The three storm drain alternatives (nos. 8, 9 and 10) are located in the southern part of the city of Laurel, Montana between the Montana Rail Link tracks on the north and Interstate Highway 90 to the south (Figure 1). The legal location is Township 2 South, Range 24 East, N1/2 NE1/4 Section 16, Laurel, Mont. 7.5 minute quadrangle. The terrain is relatively flat and is within the Yellowstone River flood plain. Historically the project area was agricultural with the commercial development within the project area being within the last 40 years. To the north of the project area (Figure 1) and north of the railroad tracks is the historic commercial district of Laurel. Within this area are a number of older brick buildings, a grain elevator and other early twentieth century buildings (Figure 3).

The area of potential effect consists of the corridors of the proposed construction. This includes the road and the buildings or structures on either side of the streets designated as the Alternatives. Installation of the storm drain system will require construction of a lift station, gravity line and force main and the excavation of trenches for pipe and pits for connections. Except for construction of the lift station and portions of the gravity line and force main, excavation will take place within street boundaries.

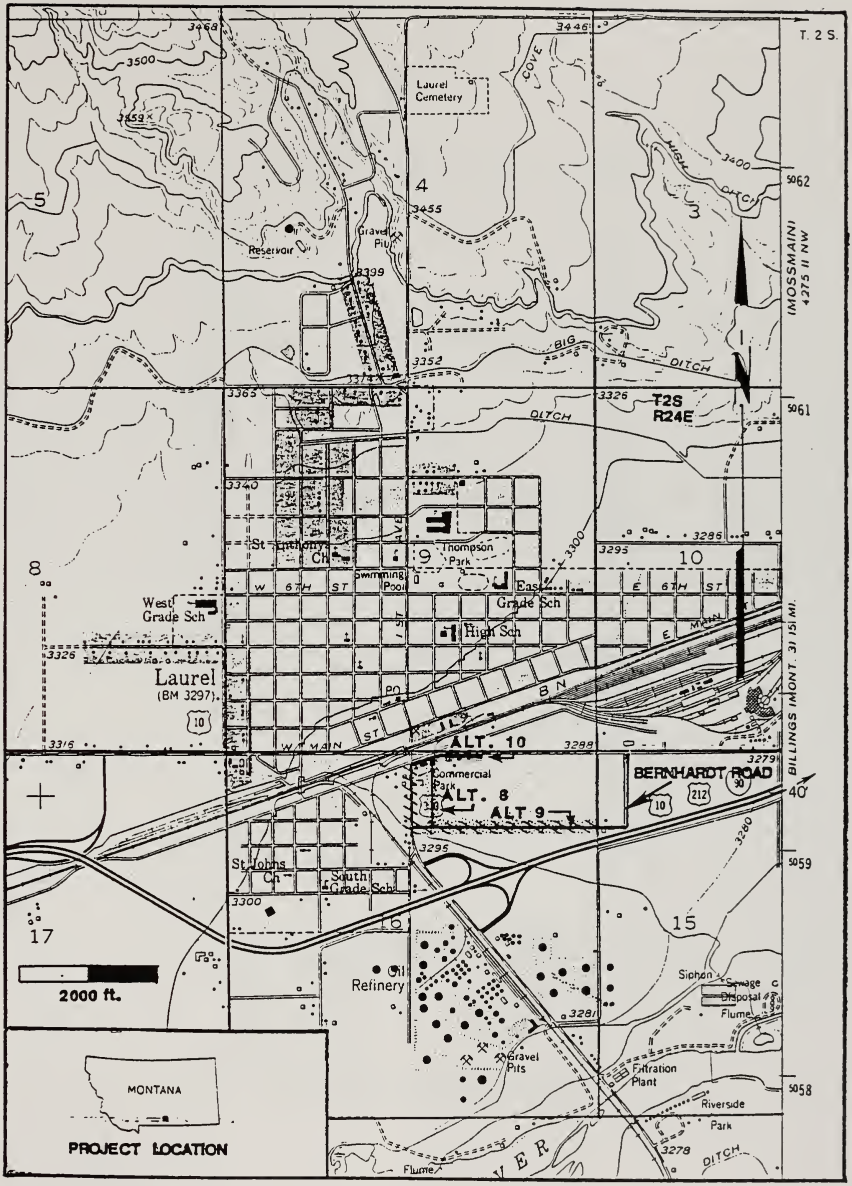


Figure 1. Map showing project location on the USGS Laurel 1956 quadrangle (photorevised 1969).

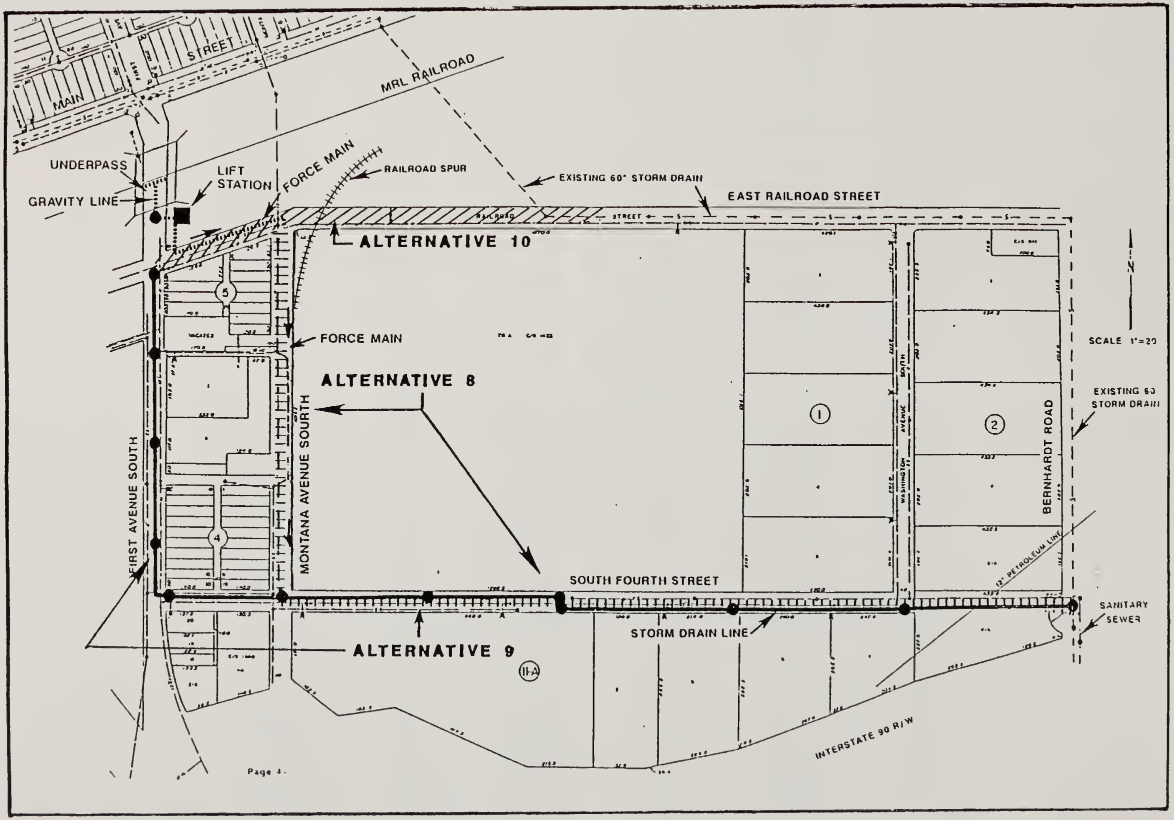


Figure 2. Detailed map showing location of the three alternative storm drain routes and some of the buildings, structures and features in the area.

1/9/96

The lift station will be situated on a small plot of unoccupied land immediately west of the Montana Power Company substation in the northeast quadrant of the intersection of First Avenue South and Railroad Street (Figure 3). It will be connected to a gravity line in First Avenue South extending northward to a point in the underpass beneath the Montana Rail Link overpass. The force main will extend southward from the lift station to a point in Railroad Street where it will connect with one of the three alternatives. The artificially leveled lift station site supports a grass cover. Two power poles are located on the site (Figure 4).

### Alternative 8

Alternative 8 (Figure 2) would require construction from the force main connection eastward along East Railroad Street approximately 450 feet, then southward about 1,100 feet along a street easement to South Fourth Street and eastward along this street approximately 2,200 feet to an existing open storm drain on Bernhardt Road.

East Railroad Street is paved and flanked by a small irrigation/drainage ditch and a power line along its northern side. The Montana Power Company substation is situated just north of the ditch. A pole yard lies immediately east of the substation. Three small elevators and a metal building occupy the southern side of East Railroad Street at First Avenue South. An abandoned railroad spur lies between East Railroad Street and the building and silos (Figure 5).

The street easement extends southward from the bend in East Railroad Street. It is paved to a point behind the IGA market where the easement narrows considerably. A railroad spur parallels the eastern side of the street to the north and gradually curves eastward into a commercial area. A metal fence borders the eastern side of the street from the northern side of the commercial area southward to South Fourth Street (Figure 6).

The street easement is unpaved south of the IGA market. A Western Drug store lies immediately south of the market. A grassed vacant area is situated between the drugstore and the paved parking lot for a Pizza Hut restaurant at the intersection of First Avenue South and South Fourth Street. A power line lies between the fenced commercial area and street easement (Figure 7).

South Fourth Street is wide and paved. There are concrete curbs along both sides. Automobile dealerships with associated parking and auto storage areas occupy the entire south side of the street. An open grassed area containing a small frame building lies east of the commercial area on the north side of South Fourth Street (Figure 8).

South Fourth Street ends at Washington Avenue South. Alternative 8 would continue eastward beyond South Fourth Street through a commercial area and connect with the storm drain onBernhardt Road (Figure 9). A vacant area covered with grasses and weeds lies between the commercial area and unpaved Bernhardt Road (Figure 10). The existing storm drain into which Alternative 8 would empty is situated at the western side of Bernhardt Road (Figure 11).

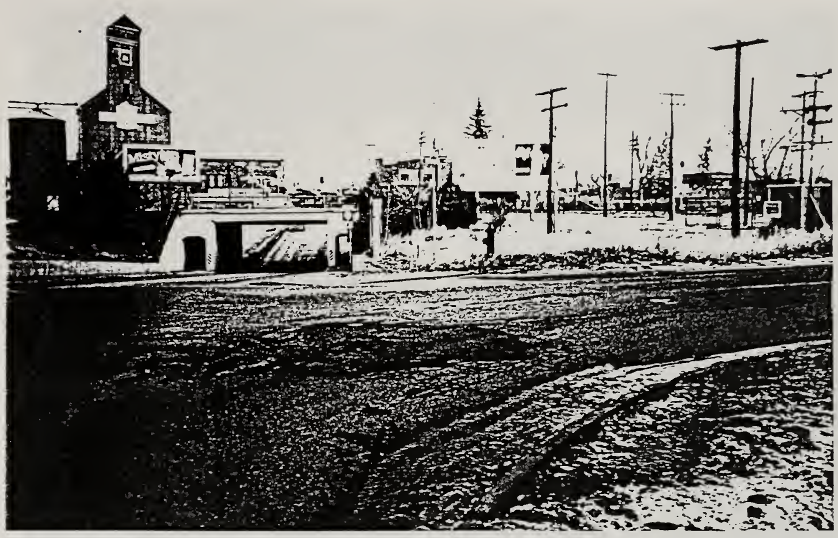


Figure 3. View northward across intersection of First Avenue South and Railroad Street showing location of proposed lift station at right-center. Note Montana Power Company substation at right and underpass at left.

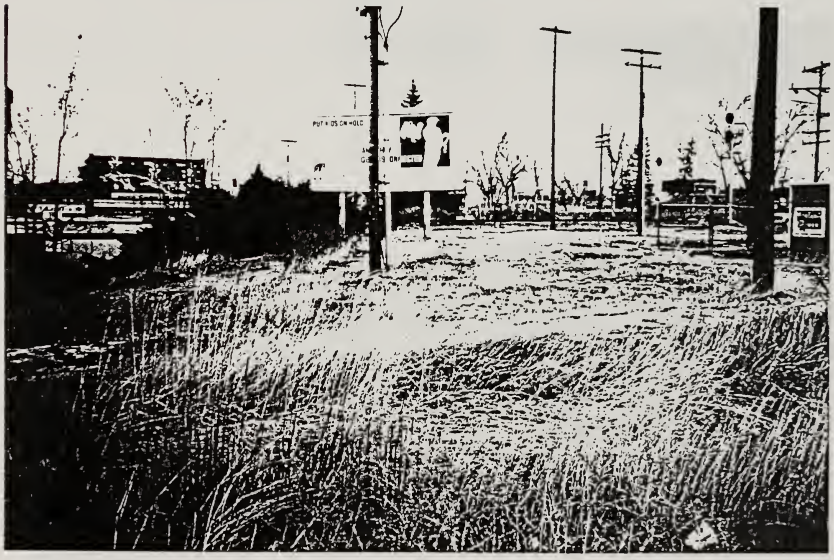


Figure 4. View of proposed lift station location. Note Montana Rail Link tracks beyond sign and Montana Power Company substation at right.

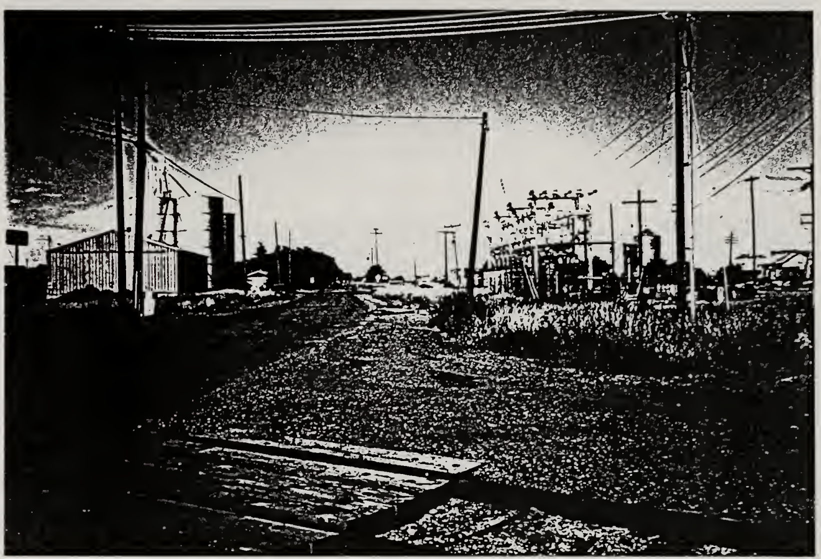


Figure 5. View westward along East Railroad Street from railroad spur crossing. Note substation at right.

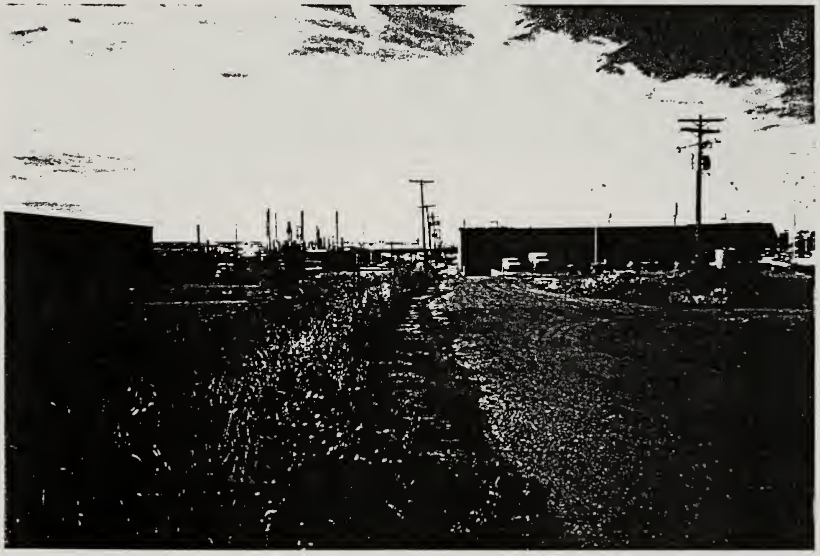


Figure 6. View southward along street easement from East Railroad Street. Note commercial area to left and IGA market at right.

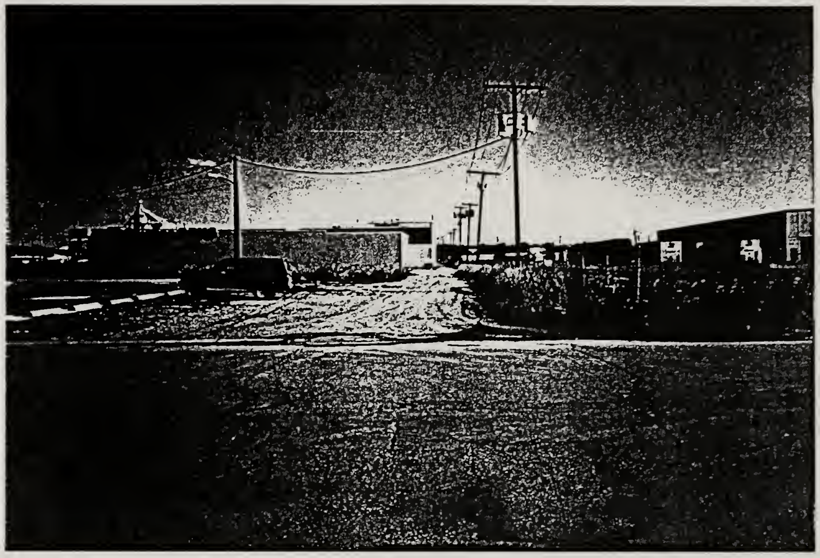


Figure 7. View northward along street easement from Fourth Street South.
Note narrowing of easement behind IGA market.

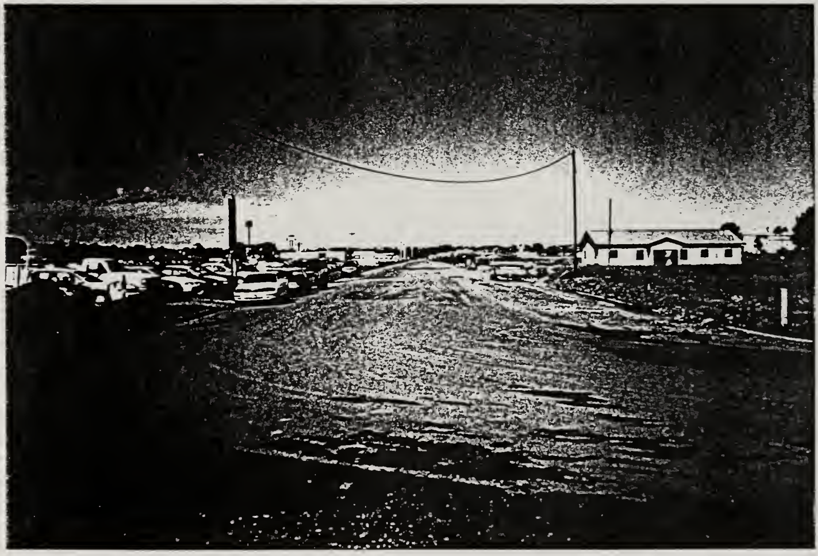
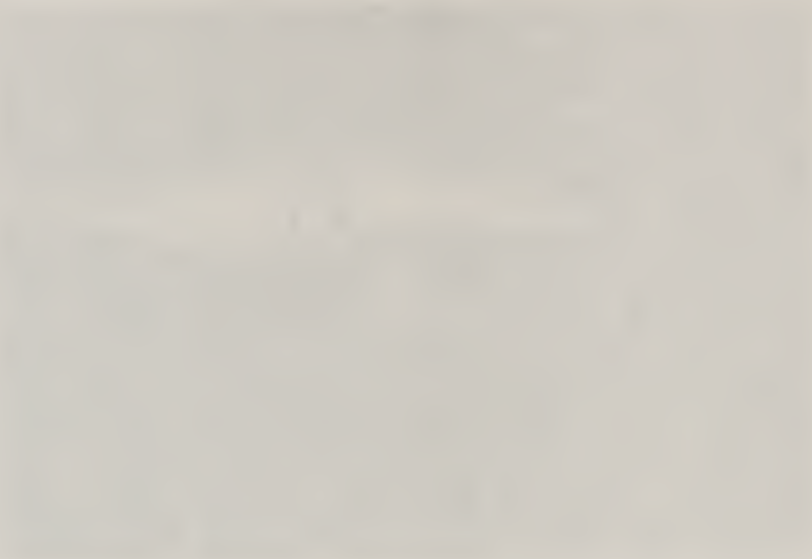
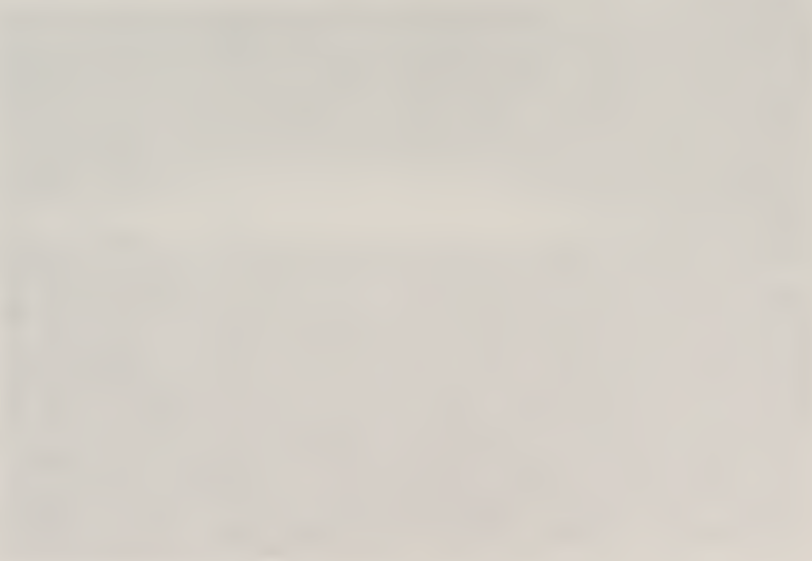


Figure 8. View westward along Fourth Street South from Washington Avenue.
Note automobile dealerships at left and small frame building at right.





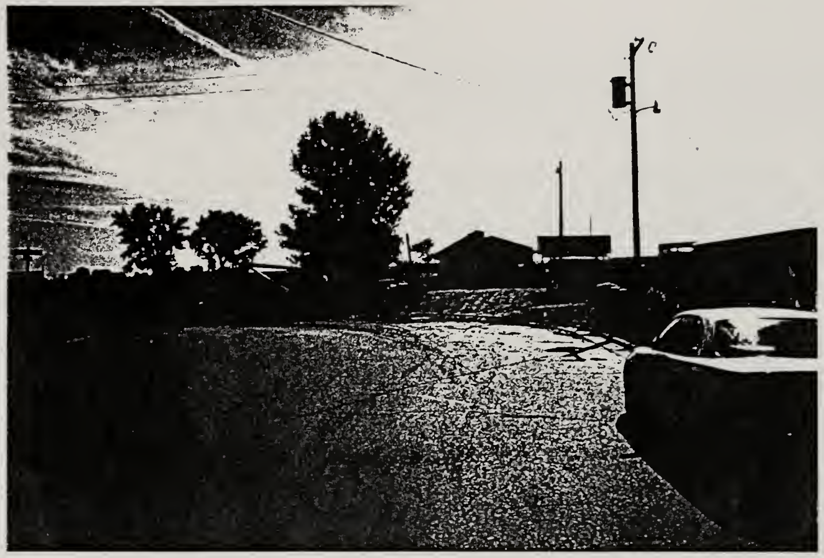


Figure 9. View eastward beyond end of Fourth Street.
Alternative 8 would pass to left of small building.

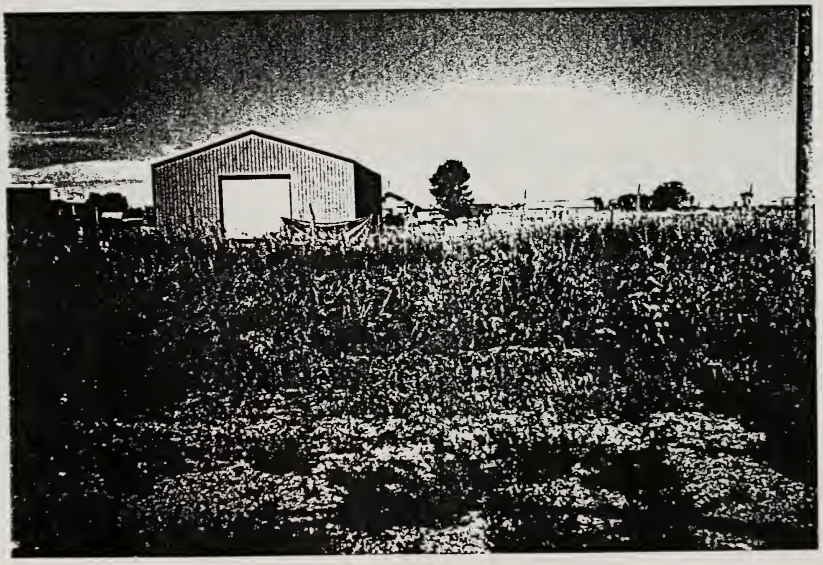


Figure 10. View westward from terminus of Alternative 8.
Storm drain would pass to right of buildings.

## Alternative 9

Alternative 9 (Figure 2) would extend about 900 feet southward on First Avenue South from the lift station connection to the intersection with South Fourth Street. From this point, the storm drain would extend eastward some 2,600 feet along South Fourth Street to the existing storm drain on Bernhardt Road.

First Avenue South is paved and lined on both sides with various commercial establishments with paved entrances and parking areas (Figures 12 and 13). South Fourth Street is paved from the intersection with First Avenue South eastward to Washington Avenue South (Figure 14). The South Fourth Street vicinity is described above.

## Alternative 10

Alternative 10 (Figure 2) would extend from the force main connection eastward along East Railroad Street approximately 900 feet and connect to an existing system beneath the street. Railroad street bends slightly to the right about one block east of South First Avenue. A railroad spur crosses the street just east of this angle. Beyond the bend, an open field occupies the north side of the street. A crushed rock-paved area is on the south side. Both shoulders of the street are covered with dense grasses and weeds. The irrigation/drainage ditch and power line continue eastward beyond the project terminus (Figure 15).

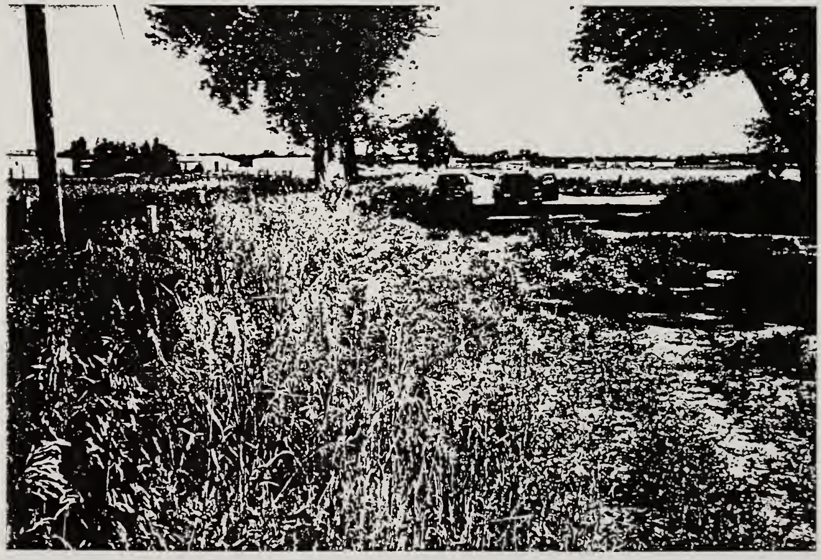


Figure 11. View northward along Bernhardt Road. Terminus of Alternative 8 is in foreground at left of partially overgrown road.

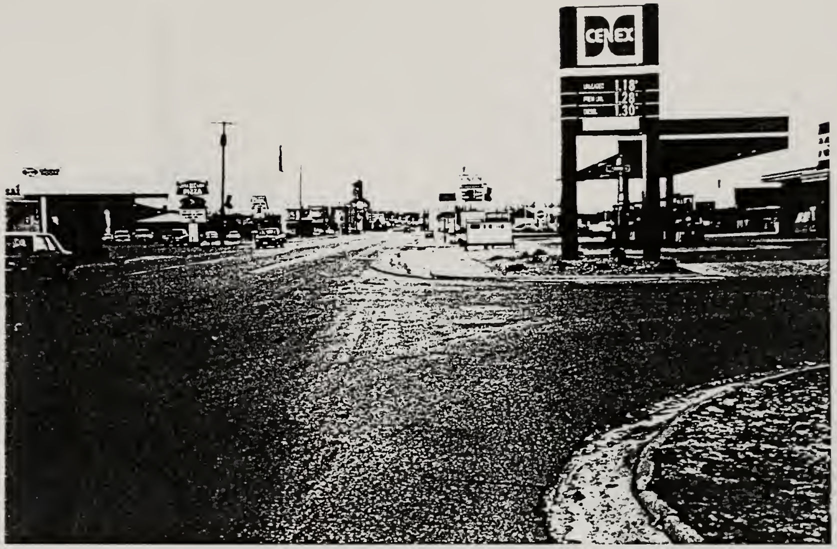


Figure 12. View northward along First Avenue South and segment of Alternative 9 from intersection with South Fourth Street. Alternative 9 would extend eastward (right) at intersection.

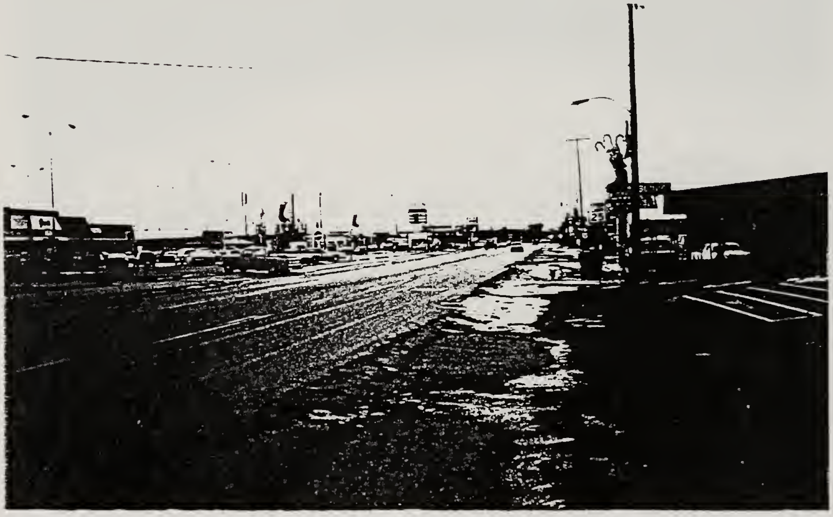


Figure 13. View southward along First Avenue South and route of Alternative 9. Note dense commercialization of area.

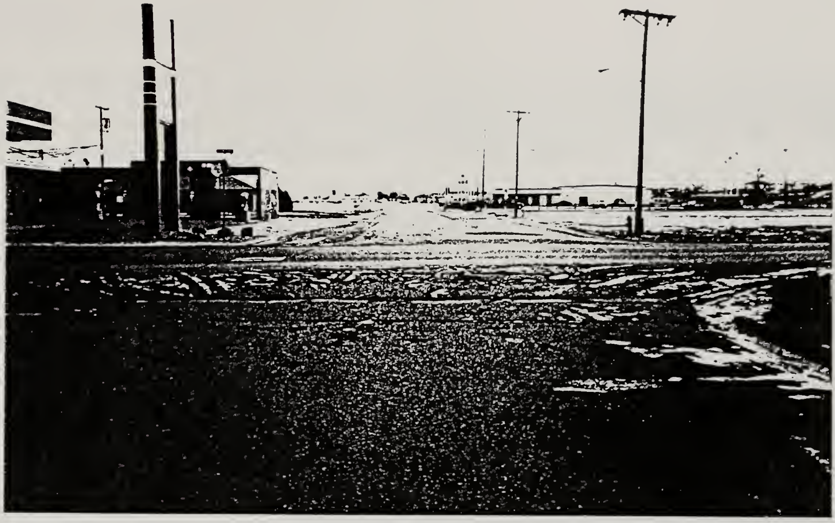


Figure 14. View eastward along South Fourth Street from First Avenue South. Alternative 9 turns eastward at this point.

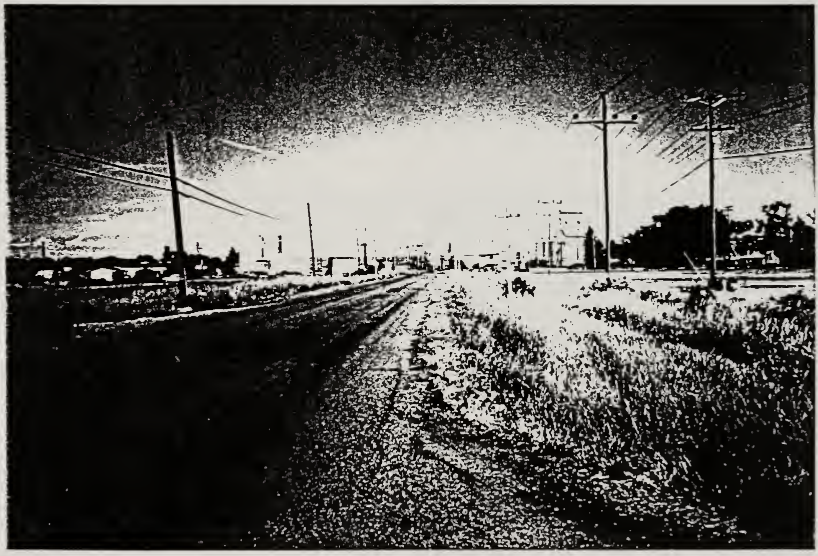


Figure 15. View westward along East Railroad Street from slightly beyond project terminus. Note irrigation ditch between street and power line.

## HISTORIC CONTEXT

Between 1880 and 1890 the Great Northern and Northern Pacific railroads arrived in Montana bringing many settlers into the state. Billings was established in 1882 and was the major shipping point for cattle and sheep to market and received freight from other points (Wright 1978). After 1900 the "honyockers" began moving into the state in large numbers.

Ranching and farming in the Yellowstone Valley expanded, and with the expansion of farmed property came a coincident development of the many irrigation systems in the valley. One of these, the Italian Ditch, crosses just south of the project area and irrigates some 2000 acres of the valley in Stillwater and Yellowstone Counties. The Italian Ditch and Flume Company filed on 16,000 miners inches of water in 1882, then, as the Italian Ditch Company, organized and adopted by-laws in 1893. Although the intake and other portions of the system have been altered through the years, it continues to bring water to lands north of the river west and south of Laurel (State Engineer's Office 1943:30-32).

The town of Laurel was started in 1906 when the Northern Pacific, Great Northern and the Chicago, Burlington, and Quincy railroads decided to locate their terminal facilities there (Johnston 1979). The town was incorporated in 1908 with its primary economic base being the railroad yards. A commercial district and residential areas grew up north of the tracks.

Oil was discovered in 1927 in the Oregon Basin field in Wyoming. At this time the Laurel Oil and Refining Company was formed and a refinery constructed at Laurel in 1930. The depression and an excess of sulfur in the gasoline produced kept the refinery closed until 1933 when the Independent Refining Association was formed and the refinery reopened. In 1943 Farmers Union Central Exchange took over the refinery in 1943 from the Independent Refining Association. Farmers Union changed its name to Cenex in the 1960s (Feyhl 1995). Over the years the refinery has grown in size, and with the Burlington Northern Santa Fe (BNSF) and Montana Rail Link railroads, continues to be an important local employer.

## SITE FILES SEARCH

Review of the site files and Cultural Resource Annotated Bibliography System revealed no recorded sites in the NE1/4 of Section 16. Although cultural resource inventories have been conducted in the vicinity of Laurel, the only two which crossed through Section 16 are an inventory for a transmission line (Caywood 1984) and the inventory for the Yellowstone River bridge (Fredlund 1986). No sites or other information pertinent to this project were in these two documents. One irrigation ditch system, the Italian Ditch, crosses just south of the project area. This ditch was recommended eligible to the NRHP under Criterion A (Munson 1995).

## SURVEY METHODS

The proposed lift station site and storm drain routes were investigated by pedestrian survey. Both sides of the streets and street easement were inspected for cultural remains noting the presence or absence and extent of disturbance. Extremely dense vegetation along both sides of East Railroad Street, the east side of the street easement and the area between the commercial property and Bernhardt Road prevented close inspection of the surface. However, irrigation ditches, borrow pits, paving and other disturbances precluded the discovery or presence of undisturbed cultural resources. Relevant notes were made and photographs were taken of each project segment to record its condition.

## RESULTS

Several inventory projects have been conducted in and around the town of Laurel by the Montana Department of Highways. No prehistoric or historic sites are recorded in the area of potential effect.

Just to the southwest of the end of Alternative 9 is the Italian Ditch (24YL663/24ST295), one of the early irrigation ditches in the valley (State Engineeer's Office 1943). This ditch irrigated fields south of the project area. The ditch is recommended eligible to the NRHP under Criterion A (Munson 1995).

Review of the Government Land Office Records indicates that the area was surveyed for the government in September 1878 by W. W. de Lacy. The only cultural feature illustrated is the "Road to Tongue River" which passed through the north half of Section 16 from the extreme northeast corner in a southwesterly direction to exit the section near the middle of its western boundary. The road would have crossed the area where the IGA market, Western Drug, Pizza Hut restaurant and other commercial properties along First Avenue South are now located. What remained of the road was obliterated by the large railroad yards immediately northeast of the project area and commercial and residential areas to the west.

The early commercial and residential development of Laurel was north of the tracks and all building and commercial construction in the project area is of recent vintage.

No prehistoric archaeological sites were discovered and no significant historic properties were observed. Construction of streets, railroad spurs, irrigation ditches and commercial development have thoroughly disturbed the area.

## EFFECTS

Installation of any of the three alternatives will have no effect on significant cultural resources. The Italian Ditch, which is potentially eligible to the NRHP under Criterion A, is outside of the area of potential effect and the undertaking will have no visual or other impact to the ditch.

## REFERENCES

Caywood, Janene et al.
1984 Cultural resource inventory: Bridger to Laurel Transmission Line Project. Prepared by Historic Research Associates. Missoula

Feyhl, Ken
1995 Geologist and former employee of Cenex. Personal communication.

Fredlund, Lynn
1986 Cultural resource inventory and assessment: Yellowstone River Bridge. Prepared for the Montana Department of Highways by GCM Services. Butte

Johnston, Elsie P.
1979 Laurel's Story, A Montana Heritage. Artcraft Printers. Butte.

Munson, Gene
1995 Italian Ditch, 24ST295/24YL663. Site inventory form on file with Archaeological Records, University of Montana, Missoula and GCM Services, Butte.

State Engineer's Office
1943 Irrigation Districts: Yellowstone County, Montana. Billings Commercial Club. Billings

Wright, Kathryn
1978 Billings, The Majic City and How it Grew. Artcraft Printers. Butte.

Montana Department
of Transportation

2701 Prospect Avenue
PO Box 201001
Helena MT 59620-1001

MASTER FILE
COPY

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FEB 27 1996
ENVIRONMENTAL

FEB 9 1996

February 7, 1996

Paul Putz
State Historic Preservation Office
1410 8th Avenue
P.O. Box 201202
Helena, MT 59620-1202

Subject: STPE 4-2(13)53
Drain Line - Laurel
Control No. 2599

Enclosed is the cultural resource report and CRABS for the above project. GCM Services found no prehistoric or historic sites within the designated project area. We request your concurrence.

If you have any questions, please contact me at 444-6258.

Jon Axline

Jon Axline, Historian
Environmental Services

CONCUR sw

MONTANA SHPO
DATE 2-26-96 SIGNED Stan Wilmott

Enclosures

cc: Bruce Barrett, Billings District Administrator
Carl Peil, P.E., Preconstruction Bureau
Joel Marshik, P.E., Environmental Services
Gordon Stockstad, Resources Section

# APPENDIX C

# THREATENED/ENDANGERED SPECIES
and
WETLANDS SURVEYS

# Wetland and Threatened and Endangered Species Report: Laurel Storm Drain Project

**Prepared by:**

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**Prepared for:**

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*2020 Grand Avenue*
*Billings, Montana 59102*

**December 29, 1995**

## INTRODUCTION

The City of Laurel, Montana, in association with the Montana Department of Transportation (MDT) and Cenex Incorporated, is considering the construction of one of three alternative storm drain alignment sections in Laurel. As part of the environmental review process, Morrison-Maierle Environmental Corporation (MME) conducted an evaluation of wetlands and potential threatened and endangered species habitat along the proposed storm drain routes. This report documents the results of those evaluations.

## PROJECT AND AREA DESCRIPTION

The project would entail replacing the existing storm drain system which directs storm water from the railroad underpass in downtown Laurel to an existing city storm drain and, ultimately, the Yellowstone River. Three alternatives (Alternatives 8, 9, and 10) are under consideration (Figures 1, 2, and 3). Regardless of the alternative selected, a new lift station would be required immediately northeast of the Railroad Street / First Avenue South intersection.

Alternative 8 (Figure 1) would require construction from the underpass east along Railroad Street for about 400 feet, then south approximately 1,000 feet along a street easement (Montana Ave.) to South Fourth Street, and then about 2,100 feet east to the existing open storm drain which runs parallel to Bernhardt Road. Alternative 9 (Figure 2) would extend south from the underpass along First Avenue South, then 2,100 feet east along South Fourth Street to the existing storm drain. Alternative 10 (Figure 3) would extend from the underpass area east for about 900 feet, at which point the drain would tie into an existing system below Railroad Street.

The entire project, under any of the alternatives, would be bordered by industrial development and would occur within the urbanized confines of Laurel. Vegetation along the routes is typical of urban areas and generally consists of grasses such as smooth brome (*Bromus inermis*), cheatgrass (*Bromus tectorum*) and wheatgrass (*Agropyron* spp.) as well as numerous ruderal weedy species.

## METHODS

A field survey of the project area was conducted on August 8, 1995. Routes were walked and driven during the survey while watching for signs of wildlife use and wetland vegetation.

Wetlands were delineated in accordance with the 1987 Corps of Engineers (COE) wetland delineation manual (Environmental Laboratory 1987). The status of hydrophytic vegetation was determined using the National List of Plant Species That Occur in Wetlands: Northwest (Region 9) (Reed 1988). In addition, an October 24, 1994 1:24,000 scale color infra-red (CIR) photograph of the project area and the Yellowstone County Soil Survey were examined.

COE routine wetland determination data forms were completed for wetlands, as were Montana Department of Transportation (MDT) wetland site evaluation forms. Copies of completed COE and MDT forms are attached. Wetlands along the project were mapped and are indicated on Figures 1, 2, and 3. Photographs of each wetland are attached to this report.

Figure 1

ALTERNATIVE 8

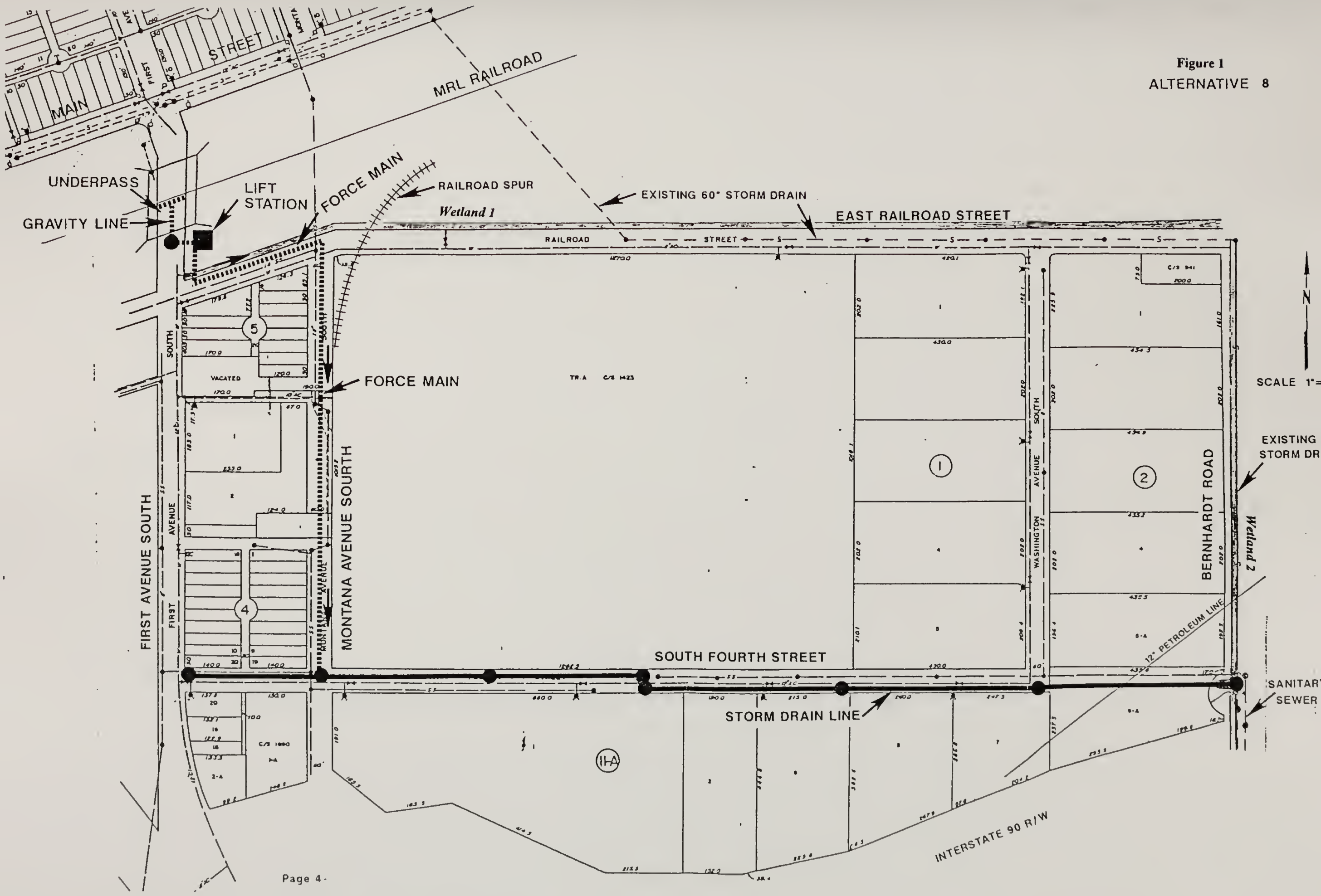


**Figure 2**

ALTERNATIVE 9

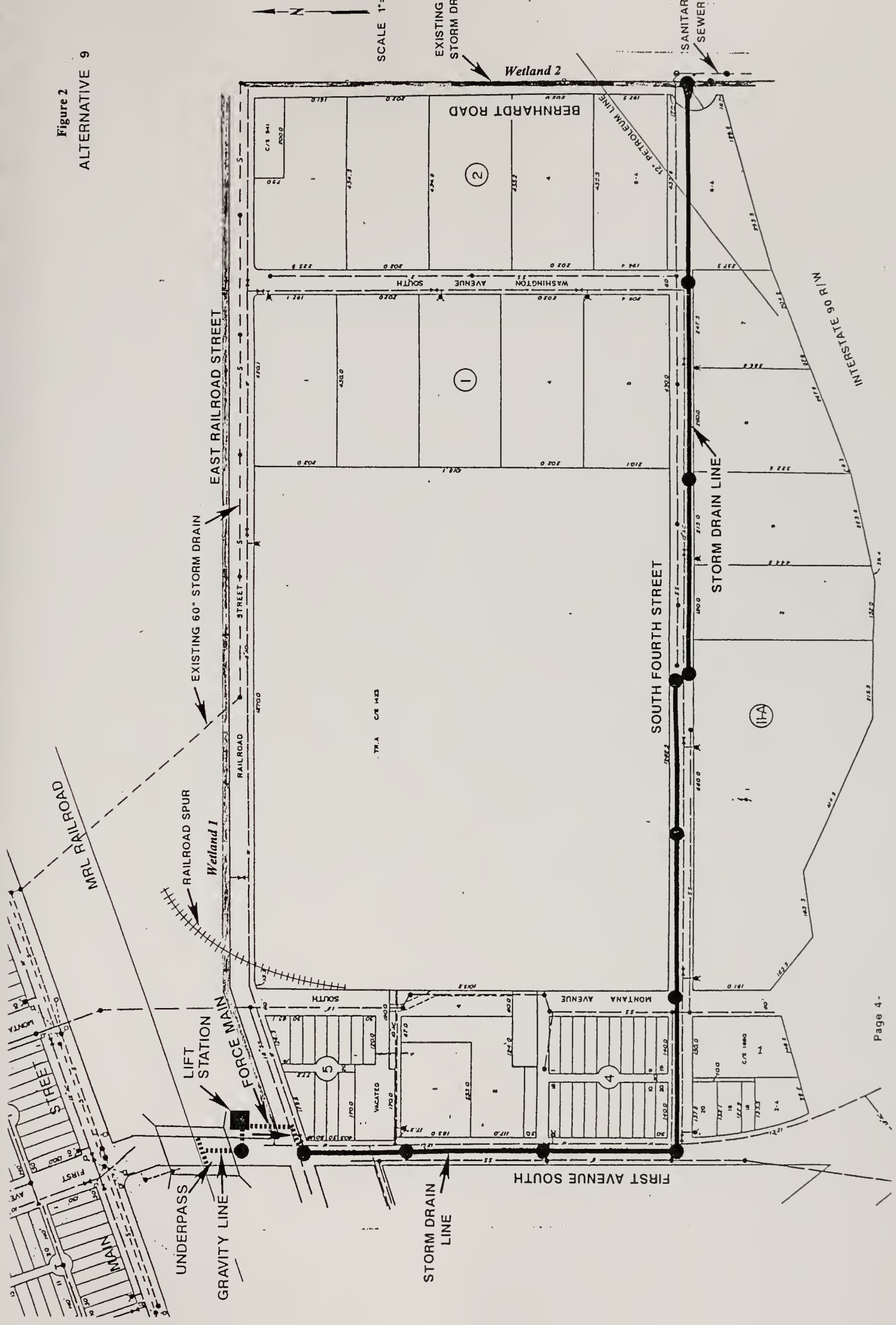
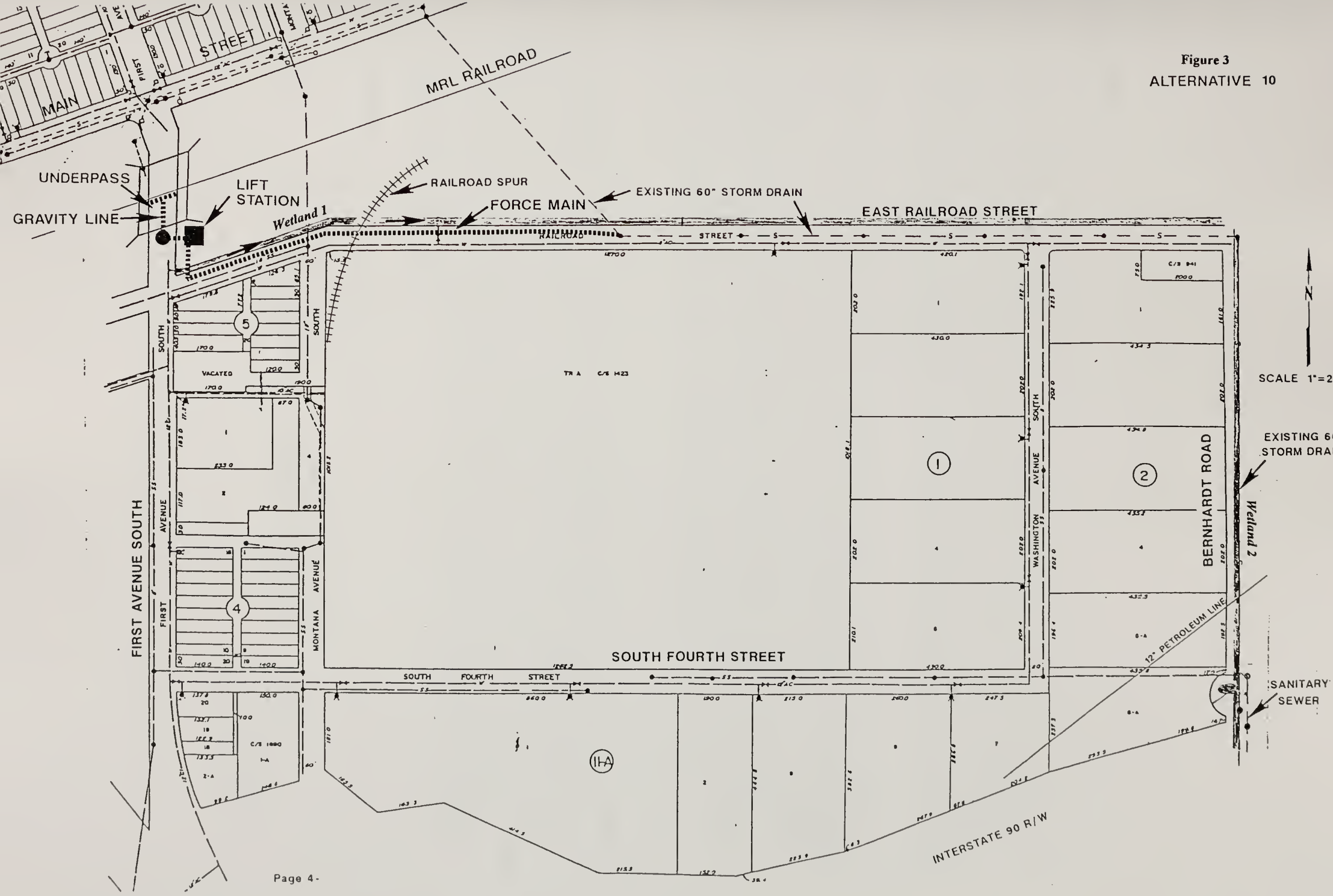


**Figure 3**

ALTERNATIVE 10



## RESULTS

### Wetlands

Two wetlands, both essentially fringes along drainage ditches, were identified along the alternative routes (see Figures and attached Photo Plate). Due in part to their limited size, low habitat value, lack of diversity, and urban location, both wetlands rated as "Category IV" (low value) sites on the MDT wetland site evaluation form. The COE generally does not consider drainage ditches excavated on dry land to be jurisdictional "waters of the United States". However, the COE and the Environmental Protection Agency (EPA) reserve the right to determine jurisdiction on a case-by-case basis (CFR vol. 51 No. 219).

Wetland 1 is a five to eight foot-wide drainage ditch that occurs along the north side of Railroad Street. This site was flooded during the survey, and was dominated by reed canarygrass (*Phalaris arundinacea*) with occasional sedges (*Carex* spp.) and cattail (*Typha latifolia*). As the pipeline would be constructed beneath Railroad Street under Alternatives 8 or 10, the only direct effect to this wetland under either alternative would occur where the pipeline would cross the ditch between the new lift station and Railroad Street. Construction of Alternative 9 would incur the same impact as Alternatives 8 or 10. It is estimated that approximately 80 square feet (0.002 acres) of Wetland 1 would be temporarily affected during construction under any of the alternatives.

Wetland 2 is a 3 foot-wide north-south drainage ditch parallel to Bernhardt Road at the terminus of Alternatives 8 and 9. The site also extends slightly (approximately 20 feet) to the west on these alternatives along a depression in an east-west drainage swale. While more than 20 lineal feet of the east-west drainage swale was flooded during the survey, these portions of the swale were not dominated by hydrophytic vegetation and did not contain hydric soil; consequently, most of the swale was not considered wetland. Wetland 2 is dominated by reed canarygrass with occasional sedges. It is estimated that approximately 240 square feet (0.006 acres) of Wetland 2 would be temporarily disturbed by construction along Alternatives 8 or 9; the site would not be affected under Alternative 10.

Estimated impacts are summarized below.

| Alt. # | *Estimated Square Feet Disturbance: Wetland 1* | *Estimated Square Feet Disturbance: Wetland 2* | Total |
|---|---|---|---|
| 8 | 80 | 240 | 320 (0.007 acres) |
| 9 | 80 | 240 | 320 (0.007 acres) |
| 10 | 80 | 0 | 80 (0.002 acres) |

No significant wetland impacts would result from any of the three alternatives under consideration. Disturbed ditches would be reseeded and restored to their original contours

following construction. Consequently, no compensatory mitigation is recommended.

### Threatened and Endangered Species

No habitat for threatened or endangered species occurs along the project, although potential habitat for the threatened bald eagle (*Haliaeetus leucocephalus*) and endangered peregrine falcon (*Falco peregrinus*) occurs over a mile south of proposed construction activities along the Yellowstone River. Construction would occur under and adjacent to existing roads through a very urbanized area. No habitat for threatened or endangered species would be affected under any of the project alternatives.

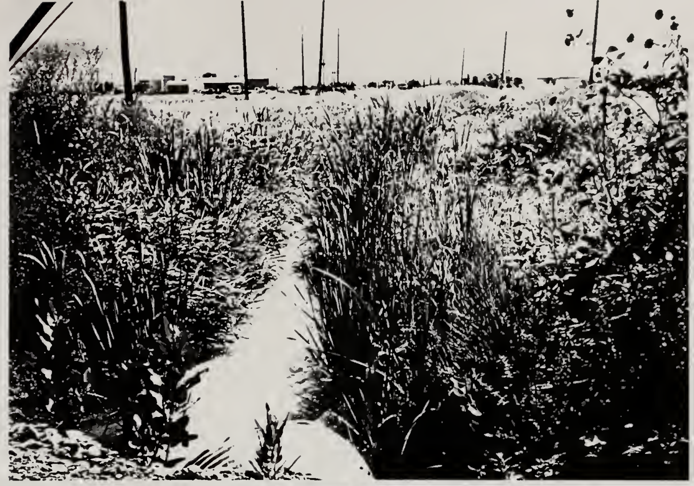
Based on the field survey, examination of aerial photographs, minor scope of the project and urban project location, it is the determination of this report that the proposed project, under any of the three alternatives, would not affect threatened or endangered species or their critical habitat.

## LITERATURE CITED

Environmental Laboratory. 1987. Corps of Engineers wetland delineation manual. Technical report Y-87-1. U.S. Army Engineer Waterways Experiment Station. Vicksburg, Mississippi.

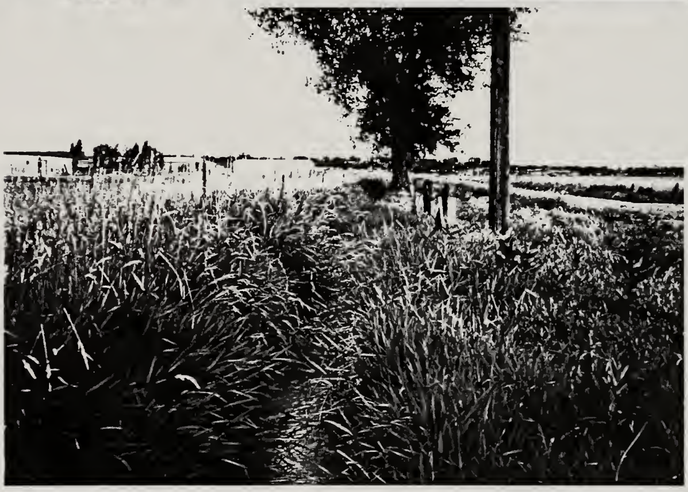
Reed, P.B. 1988. National list of plant species that occur in wetlands: Northwest (Region 9). Biological Report 88(26.9). U.S. Fish and Wildlife Service. Washington D.C.

## Photo Plate



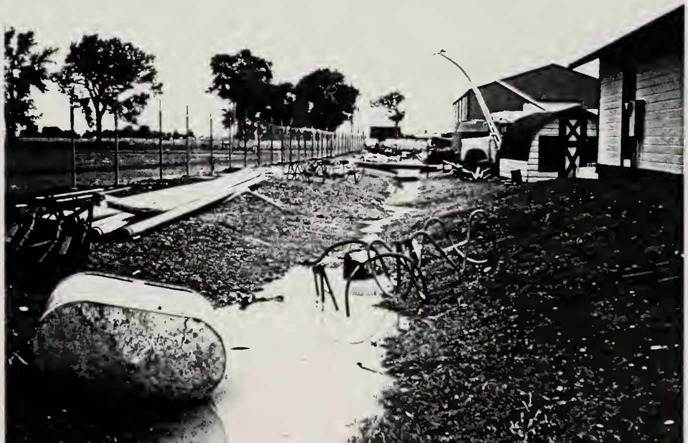
Wetland 1

*Drainage Ditch North of East Railroad Avenue*



Wetland 2

*Drainage Ditch West of Bernhardt Road*



*Non-Wetland Drainage Swale between S. 4th Street and Bernhardt Road*

## DATA FORM
## ROUTINE WETLAND DETERMINATION
## (1987 COE Wetlands Delineation Manual)

Project/Site: Laurel Storm Drain Project
Applicant/Owner: City of Laurel, MDT, Cenex
Investigator: Berglund

Date: 8-8-95
County: Yellowstone
State: Montana

Do Normal Circumstances exist on the site? [✓ Yes] No
Is the site significantly disturbed (Atypical Situation)? Yes [✓ No]
Is the area a potential Problem Area? Yes [✓ No]
(If needed, explain on reverse.)

Community ID: 
Transect ID: 
Plot ID: Wetlands 1+2

### VEGETATION

| Dominant Plant Species | Stratum | Indicator | Dominant Plant Species | Stratum | Indicator |
|---|---|---|---|---|---|
| 1. Phalaris arundinacea | H | FACW | 9. | | |
| 2. Carex spp. | H | FAC→OBL | 10. | | |
| 3. Typha latifolia | H | OBL | 11. | | |
| 4. Bromus inermis | H | Not Rated | 12. | | |
| 5. | | | 13. | | |
| 6. | | | 14. | | |
| 7. | | | 15. | | |
| 8. | | | 16. | | |

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 75-100%

Remarks: Narrow drainage ditches w/ emergent fringe + bottom

### HYDROLOGY

☐ Recorded Data (Describe in Remarks):
  ☐ Stream, Lake, or Tide Gauge
  ☒ Aerial Photographs 1994 CIR
  ☐ Other
☐ No Recorded Data Available

Field Observations:

Depth of Surface Water: 0-24 (in.)
Depth to Free Water in Pit: 0 (in.)
Depth to Saturated Soil: 0 (in.)

Wetland Hydrology Indicators:
Primary Indicators:
  ☒ Inundated
  ☒ Saturated in Upper 12 Inches
  ☒ Water Marks
  ☐ Drift Lines
  ☐ Sediment Deposits
  ☒ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
  ☐ Oxidized Root Channels in Upper 12 Inches
  ☐ Water-Stained Leaves
  ☐ Local Soil Survey Data
  ☐ FAC-Neutral Test
  ☐ Other (Explain in Remarks)

Remarks: Pits excavated @ edge of "Channel"

Wetlands 1+2

## SOILS

Map Unit Name (Series and Phase): Vananda Silty Clay - 0 to 1% Slope

Drainage Class: ______

Taxonomy (Subgroup): ______

Field Observations Confirm Mapped Type? [✓ Yes] No

Profile Description:

| | Depth (inches) | Horizon | Matrix Color (Munsell Moist) | Mottle Colors (Munsell Moist) | Mottle Abundance/Contrast | Texture, Concretions, Structure, etc. |
|---|---|---|---|---|---|---|
| d 1 | 10" | B | 2.5Y 4/1 | 2.5Y 4/4 | 10% | Silty clay |
| nd 2 | 10" | B | 2.5Y 4/2 | 2.5Y 5/6 | faint, 10% | Silty Clay |

Hydric Soil Indicators:

- ☐ Histosol
- ☐ Histic Epipedon
- ☐ Sulfidic Odor
- ☐ Aquic Moisture Regime
- ☐ Reducing Conditions
- ☒ Gleyed or Low-Chroma Colors
- ☐ Concretions
- ☐ High Organic Content in Surface Layer in Sandy Soils
- ☐ Organic Streaking in Sandy Soils
- ☐ Listed on Local Hydric Soils List
- ☐ Listed on National Hydric Soils List
- ☐ Other (Explain in Remarks)

Remarks: Marginal hydric soil at Wetland 2

## WETLAND DETERMINATION

Hydrophytic Vegetation Present? [✓ Yes] No (Circle)
Wetland Hydrology Present? [✓ Yes] No
Hydric Soils Present? [✓ Yes] No

(Circle)
Is this Sampling Point Within a Wetland? [✓ Yes] No

Remarks: Both sites are very narrow drainage ditches.

Approved by HQUSACE 3/92

(Revised June 22,

Project Name: Laurel Storm Drain Number: —

Evaluation Date: 8-8-95 Evaluator(s): Berglund-MME Site Name(s): Wetlands 1+2

Site Location: Adjacent to East Railroad Ave. + Bernhardt Rd. in Laurel

Estimated Total Wetland Size: Linear ditches Estimated Size Within Proposed ROW: < 1 acre

Conditions During Evaluation: Clear, veg. flowering, sites flooded

Wetland Classification (from MDT Wetland Classification Scheme)

| Water Regime (e.g., Permanently flooded) | Wetland Type (e.g., Marsh) | Dominant Species | Modifier (e.g., impounded) and/or Descriptor | % of Wetland |
|---|---|---|---|---|
| Seasonally flooded + Saturated | Wet Meadow (fringe along ditch) | Carex, Typha, Phalaris | Excavated Ditch | 100 |
| | | | | |
| | | | | |
| | | | | |

Wetland Type(s) is (are) locally (circle): Rare Common [✓ Abundant]

Brief Descriptive Summary: Emergent fringes + bottoms of two drainage ditches

Functions and Values Assessment

1. Wetland Size (All size criteria throughout the assessment refer to the size of the entire wetland.)

| Size | Score |
|---|---|
| > 10 acres | =10 |
| 6 to 10 acres | =5 |
| 1 to 5 acres | =3 |
| < 1 acre | [✓ =1] |

| Calcul. Score = | Rating (circle) | Point Value = (circle) |
|---|---|---|
| 1 = | [✓ Low] | [✓ =1] |
| 3 = | Moderate | =3 |
| 5 = | High | =5 |
| 10 = | Except. | =10 |

2. Habitat Diversity (Function of wetland type diversity and presence of open water component.)

| # of Wetland Types (not including open water types) | (↓ Multiply ↓) Score | Score | Open Water |
|---|---|---|---|
| ≥ 3 types | =5 | 2 = | Present |
| 2 types | =3 | [✓ 1 =] | Absent |
| ≤ 1 type | [✓ =1] | | |

Calculated Score = 1

| Calcul. Score = | Rating (circle) | Point Value = (circle) |
|---|---|---|
| 1 = | [✓ Low] | [✓ =1] |
| 2-3 = | Moderate | =3 |
| 5-6 = | High | =5 |
| 10 = | Except. | =10 |

3. Food Chain Support (Function of habitat diversity [HD] and wetland size)

| HD Rating (from #2 above) | (↓ Multiply ↓) Score | Score | Size |
|---|---|---|---|
| Low | [✓ =1] | 5 = | > 5 acres |
| Moderate | =2 | 3 = | 1-5 acres |
| High | =3 | [✓ 1 =] | < 1 acre |
| Exceptional | =4 | | |

Calculated Score = 1

| Calcul. Score = | Rating (circle) | Point Value = (circle) |
|---|---|---|
| 1-2 = | [✓ Low] | [✓ =1] |
| 3-9 = | Moderate | =3 |
| 10-15 = | High | =5 |
| 20 = | Except. | =10 |

4. Habitat for Federally-listed Endangered, Threatened, Proposed, or Candidate (C1 or C2) Species

| Wetland Receives: | Score |
|---|---|
| Regular use by such species or is designated critical habitat | =10 |
| Occasional use (e.g., infrequent, sporadic use) | =5 |
| Incidental use (e.g., chance, inconsequential use) | =3 |
| No known or suspected use | [✓ =0] |

| Calcul. Score = | Rating (circle) | Point Value = (circle) |
|---|---|---|
| 0 = | [✓ None] | [✓ =0] |
| 3 = | Moderate | =3 |
| 5 = | High | =5 |
| 10 = | Except. | =10 |

5. Habitat for Species Rated "S1", "S2", or "S3" by the Montana Natural Heritage Program (Not including those addressed under #4 above.)

| Wetland Provides: | Score |
|---|---|
| Breeding or other crucial habitat | =10 |
| Habitat that is used regularly | =5 |
| Habitat that is used occasionally (e.g., infrequent, sporadic use) | =3 |
| Habitat that is used incidentally (e.g., chance, inconsequential use) | =1 |
| No known or suspected habitat | [✓ =0] |

| Calcul. Score = | Rating (circle) | Point Value = (circle) |
|---|---|---|
| 0 = | [✓ None] | [✓ =0] |
| 1 = | Low | =1 |
| 3 = | Moderate | =3 |
| 5 = | High | =5 |
| 10 = | Except. | =10 |

6. General Wildlife & Fish Habitat (Non-T&E)

| Criteria I (apply to each group) | | | | Criteria II (apply to entire group) | Score |
|---|---|---|---|---|---|
| Substantial or significant use | =S | M | Songbirds | ≥ 6 S's or ≥ 8 M's | =10 |
| Occasional or moderate use | =M | L | Raptors | 3-5 S's or 6-7 M's | =5 |
| Little or no perceived use | =L | L | Waterfowl | 1-2 S's or 3-5 M's | [✓ =3] |
| | | M | Marsh & Shorebirds | No S's and ≤ 2 M's | =1 |
| | | L | Rodents & Insectivores | | |
| | | L | Carnivores | | |
| | | L | Ungulates | Calculated Score = 3 | |
| | | L | Herptiles | | |
| | | L | Fish | | |
| | | M | Invertebrates | | |

| Calcul. Score= | Rating (circle) | Point Value =(circle) |
|---|---|---|
| 1= | Low | =1 |
| 3= | [✓ Moderate] | [✓ =3] |
| 5= | High | =5 |
| 10= | Except. | =10 |

7. Flood Control & Storage (Function of floodwater proximity, wetland size, vegetative composition, and flow restriction; Applies only to sites within a a discernable floodplain [based on floodwater proximity, flood deposits, FEMA maps, etc.]; If does not apply, Point Value is 0.)

| | Wetland Size | Score (↓ Multiply ↓) | Score | Vegetative Composition |
|---|---|---|---|---|
| A. | > 5 acres | =5 | 3= | > 50% forested or shrub or combination |
| | 1-5 acres | =3 | 2= | 10-50% forested or shrub or combination |
| | < 1 acre | [✓ =1] | [✓ 1=] | < 10% forested or shrub or combination |
| B. | Flow Restriction | | Score | |
| | Outlet restricted or absent | | =2 | Calculated Score (A + B) = 2 |
| | Outlet unrestricted | | [✓ =1] | |

| Calcul. Score= | Rating (circle) | Point Value =(circle) |
|---|---|---|
| 0= | None | =0 |
| 2-3= | [✓ Low] | [✓ =1] |
| 4-8= | Moderate | =3 |
| 10-16= | High | =5 |
| 17= | Except. | =10 |

8. Sediment Filtration and Water Purification (Function of proximity to potential sediment/pollutant source and emergent vegetative component.)

| Likelihood to Receive Sediment/Pollutants | Score (↓ Multiply ↓) | Score | Emergent Vegetative Component |
|---|---|---|---|
| Substantial accumulations evident or likely | [✓ =2] | [✓ 5=] | > 50% emergent |
| Moderate accumulations evident or likely | =1 | 3= | 10-50% emergent |
| Accumulations not evident and unlikely | =0.5 | 1= | < 10% emergent |
| | Calculated Score = 10 | | |

| Calcul. Score= | Rating (circle) | Point Value =(circle) |
|---|---|---|
| .5-1.5= | Low | =1 |
| 2-3= | Moderate | =3 |
| 5-10= | [✓ High] | [✓ =5] |

9. Erosion Control (Flow or wave dissipation; applies only if site is on shoreline of lake [subject to wave action], river, stream, or other defined drainage; If does not apply, Point Value is 0.)

| Size of Rooted Vegetative Component | Score |
|---|---|
| > 5 acres | =5 |
| 1-5 acres | =3 |
| < 1 acre | [✓ =1] |
| | Calculated Score = 1 |

| Calcul. Score= | Rating (circle) | Point Value =(circle) |
|---|---|---|
| 0= | None | =0 |
| 1= | [✓ Low] | [✓ =1] |
| 3= | Moderate | =3 |
| 5= | High | =5 |

10. Nutrient Cycling (Potential to accumulate, process, and export nutrients [expressed as organic matter].)

| Organic Matter Accumulation | Score (↓ Multiply ↓) | Score | Proximity to Other Aquatic Habitats |
|---|---|---|---|
| Substantial accumulation evident | =3 | [✓ 3=] | Adjacent or contiguous to other aquatic habitats |
| Little to no accumulation evident | [✓ =1] | 1= | Isolated basin |
| | Calculated Score = 3 | | |

| Calcul. Score= | Rating (circle) | Point Value =(circle) |
|---|---|---|
| 1= | Low | =1 |
| 3= | [✓ Moderate] | [✓ =3] |
| 9= | High | =5 |

11. Groundwater Discharge/Recharge

| Wetland: | Criteria | Score |
|---|---|---|
| A. is a known discharge or recharge area | A, B, or C true | =5 |
| B. occurs immediately below a dam | | |
| C. is a suspected discharge or recharge area due to: ________________ | D true, all others false | =3 |
| D. has an outlet, but no inlet | A-D false. | [✓ =1] |

| Calcul. Score= | Rating (circle) | Point Value =(circle) |
|---|---|---|
| 1= | [✓ Low] | [✓ =1] |
| 3= | Moderate | =3 |
| 5= | High | =5 |

12. Uniqueness (Function of relative abundance of wetland type in Montana and replacement potential of ecological functions.)

| Frequency of Occurrence in Montana | Score (↓ Multiply ↓) | Score | Replacement Potential |
|---|---|---|---|
| Rare | =3 | 5= | Irreplaceable ecological functions |
| Common | =2 | 3= | Ecological functions replaceable with difficulty |
| Abundant | [✓ =1] | [✓ 1=] | Ecological functions readily replaceable |
| | | Calculated Score = 1 | |

| Calcul. Score= | Rating (circle) | Point Value =(circle) |
|---|---|---|
| 1-2= | [✓ Low] | [✓ =1] |
| 3-6= | Moderate | =3 |
| 9-10= | High | =5 |
| 15= | Except. | =10 |

13. Recreation/Education Potential (Subjective assessment of potential for boating, hunting, birdwatching, photography, and other recreation/education activities; remember to consider access restrictions.)

| Recreation Potential | Score (↓ Multiply ↓) | Score | Education Potential |
|---|---|---|---|
| High | =3 | 5= | High |
| Moderate | =2 | 3= | Moderate |
| Low | [✓ =1] | [✓ 1=] | Low |
| | | | Calculated Score = 1 |

| Calcul. Score= | Rating (circle) | Point Value =(circle) |
|---|---|---|
| 1-2= | [✓ Low] | [✓ =1] |
| 3-6= | Moderate | =3 |
| 9-15= | High | =5 |

## Function & Value Summary and Overall Wetland Rating

for Wetland Site(s): 1+2 - Laurel Storm Drain

| Function & Value Parameters | Point Values | Ratings |
|---|---|---|
| 1. Wetland Size | 1 | L |
| 2. Habitat Diversity | 1 | L |
| 3. Food Chain Support | 1 | L |
| 4. T&E/Proposed/Candidate Species Habitat | 0 | None |
| 5. MNHP Species Habitat | 0 | None |
| 6. General Fish & Wildlife Habitat | 3 | M |
| 7. Flood Control & Storage | 1 | L |
| 8. Sediment Filtration | 5 | H |
| 9. Erosion Control | 1 | L |
| 10. Nutrient Cycling | 3 | M |
| 11. Groundwater Discharge/Recharge | 1 | L |
| 12. Uniqueness | 1 | L |
| 13. Recreation/Education Potential | 1 | L |
| TOTAL POINT VALUE | 19 | |

Overall Wetland Rating (Circle appropriate category based on the criteria outlined below):

I II III [✓ IV]

Category I Wetland - Must satisfy one of the following criteria:

- Total Point Value of 65 or more; or
- "Exceptional" ratings for T&E/Proposed/Candidate Species Habitat or Flood Control & Storage or Uniqueness.

Category II Wetland - Does not satisfy criteria for Category I and:

- Total Point Value of 40 - 64; or
- "Exceptional" ratings for MNHP Species Habitat or General Wildlife & Fish Habitat; or
- "High" ratings for Food Chain Support or Uniqueness.

Category III Wetland - Does not satisfy criteria for Category I, Category II, or Category IV.

Category IV Wetland - Does not satisfy criteria for Category I, Category II, or Category III and:

- Total Point Value less than 26; and
- "Low" ratings for Wetland Size and Habitat Diversity.

## MDT Wetland Classification Scheme
(adapted from Windell et al.[1986] and Cowardin et al.[1979])

| Water Regime | Vegetation Type | Substrate | Wetland Type | Modifiers and Descriptors |
|---|---|---|---|---|
| * Permanently flooded<br>* Intermittently exposed<br>* Semi-permanently flooded<br>* Seasonally flooded<br>* Saturated<br>* Temporarily flooded | Rooted floating, floating-leaved, or submergent | Water, mineral, or organic | Aquatic Bed (standing water) | Modifiers<br>* Excavated ditch<br>* Excavated basin<br>* Impounded<br>* Diked<br>* Farmed<br>* Grazed<br>* Partly Drained<br>Descriptors<br>* Riparian<br>* Deepwater Habitat<br>* Drumlin Wetland<br>* Seasonal Wetland<br>* Prairie Pothole<br>* Vegetated Flat |
| | | | Aquatic Channel (within channel) | |
| | Emergent (erect, rooted, herbaceous hydrophytes [includes mosses and lichens]) | Organic (peat, muck) | Fen (typically "peatland" dominated by sedges and grasses) | |
| | | | Bog (typically "peatland" dominated by sphagnum mosses) | |
| | | | Marsh (substrate can be "muck" or mineral; not typically dominated by sedges and grasses) | |
| | | Mineral | Wet Meadow (dominated by sedges, grasses and rushes) | |
| | | | Marsh (substrate can be "muck" or mineral; not typically dominated by sedges and grasses) | |
| | | | Emergent Channel (within channel) | |
| | Shrub (woody vegetation less than 20 feet tall) | Organic (peat, muck) | Carr (shrub-dominated fen) | |
| | | | Shrub-bog (shrub-dominated bog) | |
| | | Mineral | Shrub (coniferous, deciduous, or mixed) | |
| | Forested (woody vegetation greater than 20 feet tall) | Organic or Mineral | Forested (coniferous, deciduous, or mixed) | |
| | Unvegetated | Mineral or Water | Open Water | |
| | | | Bare Substrate | |

Permanently flooded: Water covers land surface throughout the year in all years.

Intermittently exposed: Surface water present throughout the year except during years of extreme drought.

Semipermanently flooded: Surface water persists throughout growing season in most years.

Seasonally flooded: Surface water present for extended periods, especially early in the growing season, but usually absent by end of season.

Saturated: Substrate saturated to surface during growing season, but surface water seldom present.

Temporarily flooded: Surface water present for brief periods during growing season, but water table well below surface most of the year.

Excavated ditch or basin: Lies within basin or channel excavated by man.

Impounded: Created or modified by barrier or dam which purposefully or unintentionally obstructs water outflow.

Diked: Created or modified by man-made barrier or dike designed to obstruct the inflow of water.

Farmed: Soil surface has been mechanically or physically altered for crop production, but hydrophytes will reestablish if farming discontinued.

Grazed: Vegetation grazed by domestic stock.

Partly Drained: Water level has been artificially lowered, but soil moisture sufficient to support hydrophytes.

Riparian: Of, on, or pertaining to the bank of a natural watercourse.

Deepwater Habitat: Open water area with a mean annual water depth > 6.6 feet.

Drumlin and Seasonal Wetlands, Prairie Potholes, and Vegetated Flats: See 1987 COE Wetland Delineation Manual, Section G - Problem Areas.

# APPENDIX D

## CORRESPONDENCE PERTINENT
## to the
## PROPOSED PROJECT

MORRISON
MAIERLE, INC.
*An Employee-Owned Company*

ENGINEERS
SCIENTISTS
SURVEYORS
PLANNERS
2020 GRAND AVENUE • BILLINGS, MT 59102 • 406-656-6000 • FAX: 406-656-3432

August 8, 1995

Mr. Jim Flisrand, P.E., City Engineer
City of Laurel
P.O. Box 10
Laurel, MT 59044

RE: Laurel Underpass Project
MMI No. 2212.005/010/0211

Dear Jim:

As you are aware, our schedule for the preliminary study of the Laurel Underpass is quite tight. Although this letter may be a bit premature, we need to seek permission from the City of Laurel to connect the storm water discharge from the Underpass to the City's storm drainage system. We have discussed a connection to the system at East Railroad Street way and the extension of Colorado Street. We have also discussed a possible alternate connection on 4th Street (extended east) and Bernhardt Road that would allow a storm drainage extension in and around 4th street plus an area of the highway (intersection and 4th street).

Would you please send us a list of conditions, limitations and requirements of the City of Laurel for connecting the Laurel Underpass storm drainage system to the City's system.

I am faxing this letter to you (original to follow by regular mail) in hopes of a rapid response. Our tentative deadline for the study is August 14th. You timely reply will be appreciated.

Sincerely,

MORRISON MAIERLE, INC.

William G. Enright, P.E.
Municipal Services Director

cc: Richard Weed, P.E. - MDT, Billings
Patrick Kimmitt, P.E. - CENEX
Fred Sielbach, P.E. - MMI

2212.005/010/0211
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MAIERLE, INC.
*An Employee-Owned Company*

ENGINEERS
SCIENTISTS
SURVEYORS
PLANNERS
2020 GRAND AVENUE • BILLINGS, MT 59102 • 406-656-6000 • FAX: 406-656-3432

August 23, 1995

Mr. Jim Flisrand, P.E., City Engineer
City of Laurel
P.O. Box 10
Laurel, MT 59044

RE: CENEX Underpass Project
MMI No. 2212.005/010/0211

Dear Jim:

I was somewhat surprised to hear from Fred Sielbach and Dave Mosser that the City of Laurel may not allow the Cenex - MDT underpass drainage system to connect to the existing 60" storm drain line that we had discussed previously. Obviously, this has a severe impact on the cost of the project and the feasibility of completing it.

I understand that the line was originally designed by HKM in the late 1970's. I assume that during the study and design phase, HKM produced a drainage study and report that delineated the drainage basin and computed the expected flows for the system. If such a report exists, I would certainly appreciate obtaining a copy so that we can review the design and be prepared to answer any questions concerning the capacity of the storm drain, etc.

We will be glad to come to Laurel and pick up a copy, have it copied and return the original to you. As you are well aware, time is of the essence for this project, and any assistance you can provide us will be appreciated.

Sincerely,
Morrison-Maierle, Inc.

William G. Enright

William G. Enright, P.E.
Municipal Department Director, Billings Office

cc: Patrick Kimmet - CENEX
Richard Weed, P.E. - MDT, Billings
file

flisran2.doc

MORRISON
MAIERLE, INC.
*An Employee-Owned Company*

ENGINEERS
SCIENTISTS
SURVEYORS
PLANNERS
2020 GRAND AVENUE • BILLINGS, MT 59102 • 406-656-6000 • FAX: 406-656-3432

August 23, 1995

Mr. Patrick Kimmet
Refinery Environmental, Health & Safety Director
Cenex, Inc.
P.O. Box 909
Laurel, MT 59044-0909

RE: Laurel Underpass Storm Drainage Study
MMI # 2212.005/010/0211

Dear Pat:

I have been informed by Fred Sielbach that the City of Laurel is very hesitant about allowing the Laurel Underpass Storm Drain Project to connect to any portion of the existing 60″ City storm drain. In discussions with Jim Flisrand, both Fred Sielbach and Dave Mosser (MMI Project Manager for the Laurel Water Treatment Plant Expansion) were informed that the City installed the 60″ drain specifically to eliminate frequent and damaging flooding of stores in the Central Business District (CBD) along main street. Furthermore, the City has stated verbally that before they would consider granting permission to connect to the storm drain, a complete basin delineation, hydrological and drainage study would need to undertaken to prove to the City Council that the drain would handle the combined runoff from the underpass area and the area currently being served by the 60″ line.

We are somewhat surprised by this new development because:

1) The LSE report recommended this connection as an integral part of their study to correct the underpass storm drainage situation.

2) At the joint meeting in Laurel, Jim Flisrand discussed that the City would like to have Morrison-Maierle, Inc. consider putting in a gravity storm drain line in South 4th Street to take care of the drainage probelm in this area. The discharge from the underpass would be by force main to this line which would connect to the City's 60″ storm drain line in Bernhardt Road.

3) Jim Flisrand did not indicate the possibility of the City not allowing a connection to the existing storm drain during our meetings. (It may well be that the City Council has directed Jim to proceed in this new direction).

This development presents a possible change of scope in the work Morrison-Maierle, Inc. is currently completing for you. The effort required to complete a study of the magnitude that may be required by the City represents a considerable amount of time and effort that is not included into our current fees. At no time during the preparation of the Proposal or during Contract negotiation was the need for a storm drainage study of the Central Business District (CBD) ever mentioned or discussed. If such a study were to be undertaken, it would definitely have an impact on the schedule for completion of the study and the design of the project. We must also consider the possibility that the 60" drain could not accommodate the combined flows from the CBD, the underpass and the drainage area contributing to the underpass.

This situation complicates the process of recommending an alternative for the improvements to the underpass drainage. If the City of Laurel does not allow us to connect to the 60" drain, about the only option left is to construct a new line from the underpass to the river routing the drain within dedicated rights of way or perpetual easements to preclude a problem in the future similar to the one we are trying to solve today. Obviously, the cost for this drainage system would be substantially higher than any of the other cost estimates..

We are continuing to research alternatives. I will be requesting that Jim Flisrand obtain a copy of the original design report for the 60" drain. If Jim can find this report, we may be able to utilize it and determine fairly quickly whether or not the 60" drain can accept the underpass drainage.

Sincerely,
Morrison-Maierle, Inc.

William G. Enright, P.E.
Municipal Department Director, Billings Office

cc: Richard Weed, P.E. MDT-Billings

MORRISON
MAIERLE, INC.

# LAUREL UNDERPASS STORM DRAINAGE STUDY

TO: James A. Flisrand, Director Public Works
City of Laurel, Montana

FROM: Bill Enright

SUBJECT: Storm Water Runoff Analysis

DATE: September 22, 1995

MMI has been selected by MDT and Cenex to design a storm drain system to drain the storm water runoff that collects in the underpass located on South 1st Avenue in Laurel. The initial plan was to tie the new storm drain line into the City of Laurel's existing 60" storm drain line in East Railroad Street. The City of Laurel has raised some concerns with this plan that need to be resolved. The City's concern is that the 60" storm drain line may not have sufficient capacity to carry the additional storm water, which could cause system backup and flooding in the downtown area of the City.

Morrison Maierle Inc. performed a preliminary storm water runoff analysis for the area that contributes to the 60" storm drain pipe. The additional runoff that the underpass drainage basin will contribute has also been included in the calculations. Results are as follows.

1) The maximum available flow for the 60" storm drain line was calculated using the section of the line with the least slope, which is 0.3%. When the pipe is flowing full it will carry 123 cfs. The maximum flow , found at 94% full, is 133 cfs.

2) The drainage area contributing to the 60" storm drain line was broken down into three zones, shown on the attached map. The first zone, consisting of residential housing, is referred to in the calculations as the residential district. The second zone consists of commercial businesses and is referred to in the calculations as the commercial district. The third zone is the area that will contribute to the storm drain system from the underpass drainage basin. Calculations for each of these zones were based on a design storm of 5 years.

3) Hydrographs have been created for each of the zones individually along with a fourth hydrograph showing the total flow volume. These hydrographs are shown on the attached graph.

4) The projected maximum 5 year flow for just the residential and commercial districts is 110 cfs. The projected maximum flow with the underpass included is 113.6 cfs. These flow values are both below the calculated capacity of the 60" diameter pipe.

5) The depth of flow in the 60" pipe at for the current calculated 110 cfs flow is approximately 44 inches. When the flows contributing to the storm drain system for the underpass area are included, the depth of flow will increase to 45-1/8 inches.

Based on the these calculations, MMI projects that the additional storm water volume created by introducing the flows from the underpass area into the 60" diameter storm drain pipe will not have a significant impact on overall performance of the City's existing storm drain system.

/mg

E/AMB/POLICE
W. 1ST. ST.
ONE: 628-8737

Y HALL
W. 1ST ST.
ONE: 628-8791

# City of Laurel

P.O. BOX 10
LAUREL, MONTANA 59044

PUBLIC WORKS
DEPARTMENT

OCTOBER 12, 1995.

RECEIVED

OCT 1 3 1995

Morrison Maierle, Inc.
Billings, Mt

William Enright
Morrison Maierle, Inc.
2020 Grand Avenue
Billings, Mt. 59102

Dear Mr. Enright:

As a follow up to our earlier conversation, the Laurel City Council is concerned with the possible environmental issues relating to a tie-in of the underpass drain to the city storm sewer system.

The underpass drain is sanded heavily throughout the winter months due to the severe street grade at both ends of the structure. Considerable amount of sand may accumulate in the drain system and without addressing that concern in your design, the sand may develop problems for the city's storm sewer system and possibly at the outfall in the Yellowstone River.

Throughout the past year, when the underpass drain was not functioning, the standing water had a significant film on the surface. The City of Laurel received a number of complaints that the residue was oily and harming the paint on the vehicles. I assume it was a combination of residue relating from bird droppings, oil leakage, and other miscellaneous items associated with state highway and city transportation. However, the Laurel City council is concerned that the same residue will now be washed into the city storm sewer system and eventually into the Yellowstone River.

The third issue relates to the residue being washed from the underpass into the city storm sewer and then becoming the property of the City. As you know, in the near future all cities will be required to test and treat all storm sewer outfalls. The proposed tie-in of the State Highway Department's underpass drainage into the City's storm sewer system will transfer their environmental liability to the city.

City of Laurel is an EEO Employer

The City of Laurel will need these issues addressed prior to allowing the proposed tie-in of the underpass storm sewer to the City's sixty inch storm drain.

Please contact my office if you need additional information.

Sincerely,

James A Flisrand by CL
James A. Flisrand
Director of Public Works

cc: Chairman- Street Committee
Mayor

*Montana Department*
*of Transportation*

*Marc Racicot, Governor*

Billings District
P. O. Box 20437
Billings, Montana 59104-0437
(406) 252-4138

RECEIVED
OCT 17 1995
Morrison-Maierle, Inc.
Billings, MT

October 17, 1995

James E. Flisrand
Director of Public Works
City of Laurel
P.O. Box 10
Laurel, MT. 59044

Subject: STPE 4-2(13)53 - C.N. 2599
Laurel Drain Line

I have reviewed your letter to Mr. Enright, Morrison-Maierle Inc. regarding the City Councils environmental concerns over approving the connection of the proposed Laurel underpass drain line into the existing citys 60-inch storm drain.

In reply to these concerns, I offer the following comments:

1) Concern - "The underpass drain is sanded heavily throughout the winter months." MDT is now equipped and will be using "Freeze Guard" liquid deicer. This product is considered to be an environmentally safe liquid deicer and is currently in use statewide for deicing roads and bridges.

   While the use of the liquid deicer will not totally eliminate the use of normal sanding materials, a sump will be provided on the System to allow periodic clean out of sand and other debris collected from the underpass area.

2) Concern - Accumulations of "residue related from bird droppings, oil leakage, and other miscellaneous items associated with state highway and city transportation." One of the primary goals of this project is to plug and abandon the existing 15-inch gravity drain line currently passing under Cenex facilities. The new Laurel drain line would only service the existing underpass facility. The only residue generated by this project would be associated with normal highway and railroad traffic and any residue flushed in from adjoining local city streets and facilities.

   It would be anticipated the residue generated from highway traffic would be significantly reduced from what has been experienced for the past several years because the project will eliminate the every day standing water and the resultant washing action on the under carriage of vehicles. This washing action has been a big factor in the vehicle residue deposited in the underpass area.

   Once the new system is installed, it is not anticipated that the underpass area would produce any more residue than any other street in Laurel.

3) Concern - Transfer of MDT's "environmental liability to the city." I have enclosed a copy of the Friday, April 7, 1995 Federal Register, which addresses recent EPA's rulings. This copy of the Federal Register indicates the current population limit is 100,000 or more for point service permits. It also indicates that "All other Phase II dischargers are required to apply for a permit only after six years, and only if the Phase II regulatory program in place at the time requires such applications."

While it is difficult to perceive what will occur regarding this subject for the next 10 years, I believe it would be in the best interest for both Montana Department of Transportation and the City of Laurel to work together on this matter when each individual situation arises.

Please contact me at 252-4138 if you have any additional questions or concerns regarding the Laurel underpass drain.

Richard E. Weed

RICHARD E. WEED, P.E.
DISTRICT ENGINEERING SERVICES ENGINEER

REW:WK:PRE:29

C. Bruce H. Barrett
Patrick B. Kimmet - Refinery Environmental Health & Safety Director
Cenex Inc
P.O. Box 909
Laurel, MT 59044

William Enright - Morrison-Maierle Inc.
2020 Grand Avenue
Billings, MT 59102

Mark Peterson
Sam Naseem
Richard E. Weed
Paul Bronson
General File

# CITY OF LAUREL
# AGREEMENT
# FOR USE OF CITY STORM SEWER
# BY
# MONTANA DEPARTMENT OF TRANSPORTATION

This Agreement is made and entered into this 20th day of November, 1995, by and between the CITY OF LAUREL, Montana, and the MONTANA DEPARTMENT OF TRANSPORTATION, for the purpose of allowing the State highways and underpass structure in the area of First Avenue and Main Street to drain storm waters in to the City of Laurel's 60-inch storm sewer trunk line.

In consideration of the mutual covenants herein set forth, the City of Laurel, and the Montana Department of Transportation (MDT) agree and shall be bound as follows:

1. The City of Laurel agrees to maintain the 60-inch storm sewer pipe only. All connections, piping, equipment and maintenance associated with transmitting the MDT storm water to the 60-inch sewer will be borne in its entirety by the MDT.

2. For and in consideration of the City of Laurel services herein described, the MDT agrees to participate in any cost of any and all discharge permits and/or future treatment requirements of the storm waters discharging from the 60-inch storm sewer in question. In accordance with available storm water run-off analysis, the MDT agrees to participate in 4 percent of the permit and treatment costs identified above. It is further agreed that MDT shall be fully responsible for any contamination of storm water which originates from or passes through MDT structures and/or roadways.

MONTANA DEPARTMENT OF
TRANSPORTATION

District Engineer

Date: 11/15/95

CITY OF LAUREL, MONTANA

Charles G Rodgers

Charles Rodgers, Mayor

Date: 11-21-95

ATTEST:

Donald L Hackmann

Donald L. Hackmann, City Clerk

Approved as to Legal Content:

MORRISON
MAIERLE, INC.
*An Employee-Owned Company*

ENGINEERS
SCIENTISTS
SURVEYORS
PLANNERS
2020 GRAND AVENUE • BILLINGS, MT 59102 • 406-656-6000 • FAX: 406-656-3432

November 30, 1995

Mr. Jim Flisrand, P.E., City Engineer
City of Laurel
P.O. Box 10
Laurel, MT 59044

RE: MDT/Cenex Storm Drain
MMI # 2212.006...0211

Dear Jim:

At a meeting held on November 29, 1995 with Cenex and MDT at the Cenex Conference room in Laurel, it was agreed that Alternative No. 10 was the preferred method of dealing with the storm water problem in the underpass. This alternative is fully discussed in the Laurel Underpass Storm Drainage Study and Report, prepared by Morrison-Maierle, Inc. for MDT/Cenex, dated August 1995.

Alternative No. 10 provides for a lift station to be constructed near the Northeast corner of First Avenue South and Railroad Avenue along with a force main to be located in Railroad Avenue running Easterly in Railroad Avenue connecting to the City's 60-inch storm drain. The location of the force main will be within the R/W lines of Railroad Street. The exact location will be determined by the location of other utilities.

Cenex and MDT requests that the City of Laurel concurs in this plan. Both parties want to insure that design efforts proceed with concurrence of all parties involved. If you agree with is design concept, please ask the Mayor to send a letter to me stating the City's concurrence with this plan. I will forward copies to MDT and to Cenex.

If you have any questions, please contact me or Fred, we will be glad to discuss this with you.

Sincerely,
MORRISON MAIERLE, INC.

William G. Enright, P.E.
Municipal Department Director, Billings Office

cc: Mr. Patrick Kimmet, P.E. - CENEX
Mr. Richard Weed, P.E. - MDT

IRE/AMB/POLICE
17 W. 1ST. ST.
HONE: 628-8737

ITY HALL
15 W. 1ST ST.
HONE: 628-8791

# City of Laurel

P.O. BOX 10
LAUREL, MONTANA 59044

PUBLIC WORKS
DEPARTMENT

December 12, 1995

William G. Enright, P.E.
Morrison Maierle, Inc.
2020 Grand Avenue
Billings, Mt. 59102

Dear Mr. Enright:

In response to your letter dated November 30, 1995, the City of Laurel signed an agreement with the Montana Department of Transportation on November 20, 1995, allowing the Underpass structure to connect to the City's 60-inch drain.

Alternate No. 10 of the Laurel Underpass Storm Drainage Study and Report was discussed as the proposed design and received Council approval on that basis.

The City of Laurel does concur with the design concept of Alternate No 10., realizing adjustments may need to be made to accommodate the existing utilities already in place.

Please keep the City of Laurel informed as you proceed with the project.

Sincerely,

Charles G Rodgers
Charles G. Rodgers
Mayor

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DEC 13 1995
Morrison Maierle, Inc.
Billings, MT

CGR/cl

cc: Jim Flisrand, Public Works Director
Don Hackmann, City Clerk

IRE/AMB/POLICE
17 W. 1ST. ST.
HONE: 628-8737

ITY HALL
15 W. 1ST ST.
HONE: 628-8791

# City of Laurel

P.O. BOX 10
LAUREL, MONTANA 59044

Public Works
DEPARTMENT

December 21, 1995

Fred Sielbach
Morrison/Maierle, Inc.
2020 Grand Avenue
Billings, Mt. 59102

Dear Fred:

In regards to the Laurel underpass storm drainage study, the City of Laurel requested a study of feasibility and economic concerns to accommodate the storm sewer concerns of local businessmen of the area to be included with the underpass storm drainage project.

After review of feasibility and economic concerns of the project the City of Laurel does not have the funds to allow participation in the project. The City wouldn't object to either alternative #8 or #9, if the conditions were feasible over the current proposed alternative being proposed.

Sincerely,

Dave Michael

Dave Michael
Utilities Plant Superintendent

DAM/cl

RECEIVED

DEC 22 1995

Morrison Maierle
Billings, MT

City of Laurel is an EEO Employer

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VIII, MONTANA OFFICE
FEDERAL BUILDING, 301 S. PARK, DRAWER 10096
HELENA, MONTANA 59626-0096

REC

APR 10 1996

ANA DEPT OF TRANSPO
DIS ICT

Ref: 8MO

April 9, 1996

Bruce Barrett
District Administrator
MT Department of Transportation
P.O. Box 20437
Billings, MT 59104-0437

Dear Mr. Barrett:

I am writing to emphasize EPA's interest in expediting the rerouting of the MDOT drain at the Cenex refinery in Laurel, Montana. The rerouting of the drain is an integral part of the facility wide effort to prevent off-site migration of contamination.

I would greatly appreciate whatever MDOT could do to expedite the process while the project is in contract planning. We would like to see this project completed by this fall, so we can avoid the winter season and eliminate further delays.

Thank you for you assistance in this matter. If you have any questions, please contact Ms. Susan Zazzali at (406)441-1130, x226.

Sincerely,

John F. Wardell
Director
Montana Office

cc: Richard Weed, MDOT, Billings
Patrick Kimmet, Cenex

District File

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